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A Qualitative Investigation into the Influence of a Mental Health Physical Activity Intervention on University Students

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by

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> "The courage it takes to share your story might be the very thing someone else needs to open their heart to hope – Unknown".

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Abstract

Objective

Among the university student population, mental illnesses are highly prevalent. Adults aged 20-30 years have the highest rates of mood and anxiety disorders than any other age group, with approximately 12.0% diagnosed with an anxiety disorder and 7.0 to 9.0% experiencing clinical depression (Nunes et al., 2014; Pedrelli, Nyer, Yeung, Zulauf, & Wilens, 2015). Reducing or preventing the effects of mental illness among this population may have lifelong implications including improvements in coping and management of mental illness throughout the lifespan (Jaworska, DeSomma, Fonseka, Heck, & MacQueen, 2016). This research examines the lived experiences of volunteers and participants in a peer-based exercise intervention for students with anxiety and depression called, "I Move My Mood" (IMMM).

Methods

This research was guided by phenomenology to depict participants' experiences in their own voices. IMMM participants (n = 2), or students participating in the IMMM program, completed an online Qualtrics survey regarding their experiences in IMMM. Volunteers (n = 8) in the program (or students who were paired with the IMMM participants) and the primary researcher completed background questionnaires and one-on-one semi-structured interviews that were transcribed verbatim for subsequent data analysis. The credibility of the study was enhanced using field notes, member checks, and triangulation.

Results

Three themes emerged from data analysis: (1) lack of role clarity, (2) "did I make a difference?", and (3) eyes opened. Even though volunteers had mixed perceptions regarding

IMMM's effectiveness, all volunteers perceived their experiences positively and brought forward recommendations for program improvement.

Conclusions

Overall, this study provides insight into the experiences of participants and peer support volunteers in a mental health/physical activity university-based intervention. These stories shine a light on some of the challenges and benefits of implementing peer support physical activity interventions for university students experiencing mild-to-moderate symptoms of depression and/or anxiety.

1.0 Review of the Literature

1.1 Magnitude of Problem

According to the 2010 Global Burden of Disease report, mental illness is the primary cause of short- and long-term disability in Canada (Public Health Agency of Canada, 2015). An estimated $50 billion annually is attributed to mental illness, demonstrating its significance in Canadian healthcare (Mental Health Commission of Canada, 2013). The early onset of mental illness is associated with many long-term implications including financial cost, disability, delayed careers, and the onset of comorbid conditions (MHCC, 2013). The considerable financial cost is a result of both direct costs, including physician visits and pharmacotherapy, as well as indirect costs, including days off work and underperformance (MHCC, 2013). Further, a loss in productivity is one of the key outcomes of mental illness, often resulting in lost income and delayed careers. In fact the World Health Organization (WHO) contends “more working days are lost as a result of mental disorders than physical conditions” (PHAC, 2015, p. 4). Additionally, mental illness extends beyond the financial realm affecting family members, communities and caregivers, in some manner (MHCC, 2013).

Mental illness affects people of all ages, income levels and ethnicities; however, the onset of mental illness tends to occur early in life, with the prevalence peaking during early adulthood (MHCC, 2013). In fact, individuals between the ages of 15 to 24 are more likely to experience a mental illness and/or substance abuse disorder than any other age group (MHCC, 2013; Pearson, Janz, & Ali, 2013). Further individuals with an early onset of mental illness are more likely to die prematurely than the general population due to increased comorbidities and maladaptive health behaviours associated with their mental illness, such as being less physically active, smoking, and not adhering to treatment (PHAC, 2015). Since the onset of mental illness is during

young adulthood, developing interventions and treatment strategies to reduce the effects of mental illness throughout the lifespan is warranted. This paper will discuss two common types of mental illness among university students and the treatment options available on campus. Further, it will summarize the literature on using physical activity as a treatment and management strategy for anxiety and depression and discuss physical activity interventions that have been implemented in the university setting. The focus of the current study is on the evaluation of a peer-based exercise intervention for students with anxiety and depression called, "I Move My Mood" (IMMM).

1.2 Depression and Anxiety

Among the university student population, mental illness s are highly prevalent. Adults aged 20-30 years have the highest rates of mood and anxiety disorders than any other age group, with approximately 12.0% diagnosed with an anxiety disorder and 7.0 to 9.0% experiencing clinical depression (Nunes et al., 2014; Pedrelli et al., 2015). By the age of 25, Nunes et al. (2014) contend "63% of men and 75% of women in Canada have acquired some postsecondary education" (p. 102), making this age group a key target population for mental health prevention and promotion strategies on campuses (Mental Health Commission of Canada, 2013; Nunes et al., 2014; Pedrelli et al., 2015; Shaienks & Gluszynski, 2009). Reducing or preventing the effects of mental illness among this population may have lifelong implications including improvements in coping and management of mental illness throughout the lifespan (Jaworska et al., 2016).

Depression and anxiety are the most common mental illnesses among university students. In fact, according to the National College Health Assessment Survey conducted for Ontario Universities, 18.3% of students were diagnosed or treated by a professional for anxiety and 14.7% for depression in 2015 (American College Health Association, 2016). Further, 11.5% of

students reported a diagnosis of both depression and anxiety (ACHA, 2016). Anxiety and depression are the leading risk factors for suicide, which is the second leading cause of death in people aged 15 to 34 years of age (Mailey et al., 2010; Navaneelan, 2012). Both depression and anxiety also led to reduced coping and productivity which subsequently led to poorer performance and higher dropout rates among students.

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) and the International Classification of Diseases, 10th Revision (ICD-10), major depressive disorder (MDD) is commonly known as depression or clinical depression. Depression includes feelings of despair and hopelessness, detachment from life and other people, fatigue or a lack of energy, inability to make decisions or concentrate, loss of appetite, change in sleep patterns, headaches or upset stomach that occurs frequently (American Psychiatric Association, 2013; PHAC, 2015). The DSM-5 states a major depressive disorder may be diagnosed when five or more symptoms are present during the same 2-week period that represent a change from previous functioning, and at least one of the symptoms must be (1) or (2) in the following list:

> "1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful).
>
> 2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
>
> 3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month) or decrease or increase in appetite nearly every day. Note: In children, consider failure to make expected weight gains.
>
> 4. Insomnia or hypersomnia nearly every day.

5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).

6. Fatigue or loss of energy nearly every day.

7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).

8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).

9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide" (APA, 2013; Lam et al., 2016, p. 512).

Generalized anxiety disorder (GAD) is one type of anxiety disorder which "is characterized by excessive anxiety and worry about multiple events or activities such as school or work difficulties, which is apparent on a majority of days over the previous six months" (Katzman et al., 2014, p. 22). Some of the key characteristics of generalized anxiety disorder include "persistent and excessive anxiety and worry about various domains, including work and school performance, that the individual finds difficult to control" (American Psychiatric Association, 2013, p. 190). Furthermore, the individual may experience physical symptoms, "including restlessness or feeling keyed up or on edge; being easily fatigued; difficulty concentrating or mind going blank; irritability; muscle tension; and sleep disturbance" (APA, 2013, p. 190). In particular, the DSM-5 criteria for GAD includes: (1) excessive anxiety and worry more days than not for at least 6 months and (2) the anxiety and worry is difficult to control. Further, the anxiety and worry are associated with 3 or more of the following symptoms:

(1) restlessness or feeling on edge, (2) being easily fatigued, difficulty concentrating or mind going blank, irritability, (3) muscle tension, and (4) sleep disturbance (Katzman et al., 2014).

1.3 Treatment and Interventions for Depression and Anxiety

Within the community setting, mental health services covered under Canada's universal health care system are typically delivered through primary care physicians, family health teams and psychiatrists (Nunes et al., 2014). Pharmacotherapy and counselling are the first-line treatments for mood and anxiety disorders and physicians often prescribe medications to treat these disorders (Kennedy et al., 2016; Public Health Agency of Canada, 2014). Despite the available treatment options for individuals with depression and anxiety, only 25% of young adults aged 19 to 25 receive services for mental health problems in Canada (Nunes et al., 2014). Further, the treatments for these disorders vary in their effectiveness. For individuals prescribed antidepressant medication, between one-third to two-thirds do not respond to the first medication prescribed and 15-33% do not respond to multiple interventions (Carek, Laibstain, & Carek, 2011). Medications for these disorders are also expensive and associated with a number of side effects. Individuals with anxiety and depression also face barriers to obtaining treatment, as medications and counselling services are often expensive and can be difficult to access due to long wait times. Further, stigma associated with mental illness often prevents many individuals from seeking treatment due to fear of judgement or being labeled as having a mental illness (Nunes et al., 2014).

Many Canadian campuses offer a range of services to students, including counselling services, on-site psychological assessment, and treatment clinics that are often at a reduced cost (Nunes et al., 2014). Typically students access counselling services for issues with relationships, anxiety and stress, depression, grief, academic, and career counselling (Cairns, Massfeller, &

Deeth, 2010; Nunes et al., 2014). Further, the extent of treatment for mental health problems such as anxiety, depression, and substance use disorders varies across institutions (Lees & Davis, 2012; Nunes et al., 2014). When mental health services are available for students on campus, there are typically limited resources available for treatment purposes, which results in long wait times and the need for referral off-campus (Nunes et al., 2014).

Universities and colleges often report issues with the demands for increasing student psychopathology, the severity of issues among students and the demand of counselling service usage on campus (Jaworska et al., 2016; Pedrelli et al., 2015). In short, "post-secondary institutions still face challenges when attempting to prevent, identify, and treat mental illness on campus" (Jaworska et al., 2016, p. 767). According to a 2016 National College Health Assessment (NCHA) survey for Ontario Universities, within the past 12 months, 61.4% of all students reported feeling hopeless and 89.2% felt overwhelmed by all they had to do (American College Health Association, 2016). Furthermore, these authors reported that 65.4% of students felt overwhelming anxiety and 46.1% felt so depressed it was difficult to function. Nunes and colleagues (2014) contend that, on average, the wait time for a counselling appointment on campus is 7 days in Ontario; however, many students may wait up to a month for an appointment due to the high demand for services. Further, the time in the academic year affects wait time, and some students report waiting months for a follow-up appointment with a practitioner (Nunes et al., 2014). Therefore, there is a need for universities to develop and implement accessible mental health strategies for students on campus to deal with the increasing volume of students accessing mental health services. To understand whether institutions are supporting mental health on campus appropriately, it is recommended universities develop effective interventions, measure

the impact of initiatives and services, and publicly disseminate the information (Jaworska et al., 2016).

1.4 A Case for Physical Activity

There is evidence for prescribing exercise as therapy for chronic diseases including obesity, diabetes, hypertension, coronary heart disease, and metabolic syndrome (Carek et al., 2011; Pedersen & Saltin, 2015). Physical activity is a relatively low-cost intervention associated with a number of physical benefits, such as strengthening bone and muscle, and helping to maintain a healthy body weight (Canadian Society for Exercise Physiology, 2013). Exercise is also associated with many positive outcomes for mental health including a sense of purpose and value, better quality of life, sleep improvements, reductions in stress, and improved social connections (Carek et al., 2011; CSEP 2013; Pedersen & Saltin, 2015). Despite the known benefits of physical activity, less than 2 in 10 adults between the ages of 18 and 79 meet the Canadian Physical Activity Guidelines of 150 minutes of moderate-to-vigorous physical activity, accumulated in bouts of 10 minutes or more (Clarke, Colley, Janssen, & Tremblay, 2019). This number is even lower in individuals with anxiety and depression as they face barriers including, "depressive symptoms, higher body mass index, physical co-morbidities and lower self-efficacy" (Schuch et al., 2017, p. 139-140). Further, low physical activity levels are associated with an increased risk of anxiety and depression, as well as the development of numerous chronic diseases, and individuals with anxiety and depression often report lower levels of physical activity and higher sedentary behaviour (Schuch et al., 2017). DeBoer, Powers, Utschig, Otto, and Smits (2012) reported that individuals who exercise regularly tend to have lower stress and greater well-being than individuals who do not exercise regularly. Further, individuals who exercise regularly are significantly less likely to meet the diagnostic criteria for anxiety

disorders, including panic disorders, specific phobias, and generalized anxiety disorders (DeBoer et el., 2012).

For individuals with mild to moderate major depressive disorder, the Canadian Network for Mood and Anxiety Treatments (CANMAT) recommends exercise as a first or second line treatment and as a monotherapy (e.g., using exercise alone) or adjunctive therapy to traditional treatments (Ravindran et al., 2016). For generalized anxiety disorder, CANMAT recommends exercise as an alternative therapy, particularly when individuals fail to respond to an optimal treatment trial of first and second line pharmacological and psychological treatments used alone or in combination (Katzman et al., 2014). CANMAT's guidelines reflect the findings from systematic reviews and meta-analyses that demonstrate consistent evidence of the antidepressant effects of exercise for major depressive disorder (MDD) and the lack of research concerning the effectiveness of exercise as a treatment for anxiety disorders (Carek et al., 2011; Pedersen & Saltin, 2015; Rosenbaum, Tiedemann, Sherrington, Curtis, & Ward, 2014; Stonerock, Hoffman, Smith, & Blumenthal, 2015). Systematic reviews have shown physical activity has antidepressant effects on adults with a DSM-5 diagnosis of major depressive disorder, schizophrenia or schizoaffective disorder, bipolar disorder, as well as an ICD diagnosis of affective disorder and generalized anxiety disorder (Rosenbaum et al., 2014). As such, physical activity may be a promising intervention to manage generalized anxiety and depressive symptoms among university students.

1.5 Mental Health Physical Activity Interventions on University Campuses

The American College Health Association's Healthy Campus 2020 goals identified the "importance of developing cost-effective physical activity interventions to improve student's health and success" (Sharp & Caperchione, 2016, p. 630). Further, increasing physical activity as

an adjuvant to counseling in post-secondary students would appear to be a relatively low cost form of treatment for students with anxiety and depression (Mailey et al., 2010). Some university/college interventions have been developed to increase physical activity, reduce stress, and prevent or treat mental illness among university students. In this section, six different mental health physical activity programs will be discussed and the evaluation of an Ontario university program, IMMM, will be explained. These six interventions were selected because they were conducted in a university population and demonstrated the heterogeneity in interventions for this population.

1.5.1 Forest Walking. Bang and colleagues (2017) examined the physical and psychological effects of a lunchtime campus forest-walking program that targeted university and graduate students in South Korea ($N = 99$). A quasi-experimental design with a control group and pre/post-test design was used. The intervention group participated in a six week walking program, where students walked as a group once per week in a forest off campus and were instructed to walk once per week on an individual basis (Bang et al., 2017). Additionally, students were given pedometers to monitor their physical activity, walking reminder text messages once per week, one lecture on stress management, and take-home information handouts about mental and physical health. The program was based off the Information–Motivation–Behavioural skills (IMB) model in which students were provided with health behaviour information (via lectures and hand-outs), motivation (via pedometers and text message reminders), and behavioural skills (campus forest walking) to increase their health behaviour of physical activity and subsequently the health outcomes of body composition, bone density, cholesterol, heart rate variability, and depression. Students in the control condition were asked to maintain their regular schedule and physical activity levels. All students were assessed pre- and

post-intervention using various objective measurement tools. After the program, students in the forest walking program had a significant increase in health promoting behaviours in the areas of physical activity, health nutrition, stress management, and spiritual growth in comparison to the control group (Bang et al., 2017). Further, individuals in the walking group had significant increases to parasympathetic nerve activity and significant decreases in depression scores, indicating "forest walking could be a simple, accessible and low-cost strategy to improve physical and mental health" among students (Bang et al., 2017, p. 737). The strengths of this research study included the utilization of a control group. Some limitations to the study suggested by the authors included the fact that the participants were volunteers, indicating a possible selection bias. Furthermore, the authors noted the social influence of other students within the walking groups could have influenced the outcome of the intervention (Bang et al., 2017).

1.5.2 Freshman 5 to Thrive/Cope Course. Melnyk and colleagues (2014) evaluated the effects of a Freshman 5 to Thrive/Cope course offered to university undergraduate students in the United States. The course used cognitive-behavioural therapy techniques and aimed to improve healthy lifestyle choices and behaviours, mental health outcomes, and academic persistence in college freshmen (Melnyk, Kelly, Jacobson, Arcoleo, & Shaibi, 2014). Similar to Bang and Colleagues (2017), a quasi-experimental design with a control group and pre/post-test design was used. A convenience sample of college freshman (n = 33) enrolled in the course were recruited on a volunteer basis, and individuals in the control group were recruited from another department that did not participate in the course (n = 16). To target physical activity, students in the intervention group wore pedometers daily and were encouraged to increase their number of steps by 10% every week. They recorded their steps using a log, and were given credit for the

course based on their step progress. Further, once per week students had two hours of class and one hour of physical activity in a group. Physical activity sessions included activities such as water aerobics, rowing, circuit training, volleyball, dancing, hiking, and rugby. Students were also encouraged to be physically active two additional times per week. A pre-post quasi-experimental design was followed, and students were assessed using various self-report and objective measures. After the intervention, it was found that students who participated in the program had greater intentions to live a healthy lifestyle compared to the control group. They also had increased nutrition knowledge, decreased anxiety, decreased anger, and decreased destructive behaviour, while the control group had no significant changes in nutrition knowledge, depression, anxiety, or anger. Additionally, COPE students significantly increased their physical activity from baseline, and significantly increased the number of steps taken per week from the beginning of the semester to the end. The COPE students also had a higher college retention rate than students who did not take the course, and a significant decrease in depressive and anxiety symptoms was observed compared to baseline in students who participated in COPE. These results indicated COPE is a promising intervention that can be used to enhance healthy lifestyle behaviours and improve mental health outcomes in college freshman, particularly those with elevated anxiety and depression (Melnyk et al., 2014). Similar to Bang and colleagues (2017) a strength of the research study included the use of a control group. Some limitations of the research study included a possible selection bias, as students enrolled in the course were not randomly assigned. Additionally, there was a larger intervention group than control group.

1.5.3 Internet-Based. Even though many interventions have positive effects on anxiety and depression, not all interventions have been successful. A study by Mailey and colleagues (2010) examined the effects of an internet-based physical activity intervention on physical

activity, self-efficacy, depression, and anxiety among college students (n = 47) who were receiving mental health counseling in the United States. The intervention was a 10-week program that provided students with bi-weekly online modules that taught students the importance of exercise, self-efficacy, overcoming barriers, and maintaining an active lifestyle. Students who were "registered for and receiving mental health counseling were recruited to participate", and those who met the inclusion criteria were randomized to a control or intervention group (Mailey et al., 2010, p. 648). The control group was a group of students who received the standard of care (counselling) and were assigned to a wait list for the program. Participants were given pedometers as a self-monitoring tool and physical activity cue, and participants completed weekly exercise logs. The participants also attended two monthly meetings with a physical activity counsellor who provided feedback on exercise logs and pedometer records. Participants' physical activity was measured using accelerometers and self-report questionnaires. Anxiety and depression were assessed using the State-Trait Anxiety Inventory (STAI) and Beck Depression Inventory (BDI), respectively (Beck, Steer, & Brown, 1996; Spielberger, Gorsuch, & Lushene, 1970, as cited in Mailey et al., 2010). Participants also had an evaluation questionnaire detailing the degree of satisfaction with the program. The results indicated a significant time effect for physical activity, as both groups increased their physical activity level across the 10-week intervention, with a larger increase in the intervention (d = 0.68) condition than the control (d = 0.05). The effects on depression and anxiety were non-significant, which could be due to the small sample size or short intervention period. The student evaluation of the program had a low response rate, but revealed a high degree of student satisfaction with the monthly meetings, pedometer information, intervention website, intervention staff, and the overall experience with the study; however, the website had a lower

amount of satisfaction. Some strengths of the research study included the randomization of participants to a control or intervention group. Limitations included a small sample size, and a short length of time for the intervention. The authors recommended further investigation into the effects of internet-delivered physical activity programs and improvements to internet-based programs, such as making interventions less text intensive and more interactive with social networking features (Mailey et al., 2010).

1.5.4 Pedometer-Based. Another mental health intervention that used technology included a pedometer-based physical activity intervention. Sharp and Caperchione (2016) assessed the effects of a 12-week pedometer-based intervention on physical activity behaviour, health-related quality of life, and psychological well-being of university students in Canada (N = 184). Students were randomly assigned to a control or intervention group. Those in the intervention group were provided with a pedometer, monthly tracking logs, and follow-up e-mails to encourage students to increase their daily steps each week to a goal of 10,000 steps per day. Pre- and post-intervention, participants were asked to respond to the Godin Leisure-Time Exercise Questionnaire and the Health-Related Quality of Life Questionnaire (Godin, 1985; Ware, Kosinski, & Keller, 1996, as cited in Sharp & Caperchione, 2016). Further, psychological well-being was measured using the General Health Questionnaire-12 (Goldberg & Williams, 1988, as cited in Sharp & Caperchione, 2016). After the intervention, the authors reported there was no significant difference in physical activity, HRQOL or psychological well-being between the groups. In fact, psychological wellbeing, vigorous physical activity and mental health status decreased among both groups across the duration of the study. The authors noted these declines in physical activity are commonly observed in university students, as they face many challenges including a heavy workload and elevated levels of academic stress. Strengths of the research

study included the randomization of participants into a control or intervention group, and a large sample size. The limitations of the research study included limitations to external validity, as participants were taken from one cohort of students, meaning results may not be generalizable to other groups. Additionally, external factors such as fluctuations in physical activity and stress may have influenced assessment results. The authors recommended more intensive interventions and an increase in face-to-face contact time with participants, although it is questionable if increasing the intensity is effective in eliciting change (Sharp & Caperchione, 2016).

1.5.5 Physical Activity Counselling. The final mental health physical activity program included a counselling-based intervention. McFadden, Fortier, and Guérin (2017) examined the effects of a two-month physical activity counselling (PAC) intervention on depressive symptoms and physical activity in female undergraduate students with depression (n = 5) in Canada. The PAC intervention used motivational interviewing rooted in the Self Determination Theory (Deci & Ryan, 1985, as cited in McFadden et el., 2017). It involved four phases of motivational interviewing including "1) Engaging: the counsellor developed a trusting relationship with the participant[,] 2) Focusing: the counsellor helped the participant find a clear focus and direction towards change[,] 3) Evoking: the counsellor elicited and strengthened the participant's own motivation for change[,] 4) Planning: the counsellor guided the participant in developing and implementing a realistic change plan" (McFadden et al., 2017, p. 27-28). A multiple baseline, single-subject design was followed with four study phases including: baseline, intervention, end-point, and follow-up. Participants were their own controls and their symptoms of depression and physical activity were measured using self-report questionnaires that measured their depressive symptoms and self-reported physical activity every two weeks (Patient Health Questionnaire-9 and Godin Leisure-Time Exercise Questionnaire) (McFadden et al., 2017). Participants were also

given pedometers to measure their physical activity. One month following the intervention, a follow-up phone call was conducted with each participant to measure depressive symptoms and self-report physical activity. After running statistical analyses, depressive symptoms and self-reported physical activity did not significantly change from baseline. However, decreases in depressive symptoms and increases in self-reported physical activity from baseline were large according to Cohen's effect size estimates, indicating that two months of PAC may be an effective approach to reduce depression and increase physical activity in this population (McFadden et al., 2017). Several limitations to the research study included a short intervention period, which limited the amount of data points that could be statistically analyzed. The authors recommended that extending the intervention period and recruiting more participants may yield more promising results. There were limitations to external validity, as the data may not be generalizable to a broader population of females with depression. Furthermore, the authors noted that there were many "rich conversations" between the counsellor and participants about the effectiveness of the program that was not included in the results due to the quantitative nature of the study. It was recommended that future research using qualitative or mixed methods techniques would be beneficial to obtain a holistic picture of the effectiveness of PAC (McFadden et al., 2017).

The types of mental health physical activity programs that are being offered to post-secondary students are widespread and offer mixed results for anxiety and/or depression symptomatology. Given that mental health physical activity programs yield mixed results in the literature, it may be beneficial to develop a deeper understanding of the participant experience in the program using a qualitative methodological approach. Qualitative methodology is used to "understand and represent the experiences and actions of people as they encounter, engage and

live through situations" (Elliott, Fischer, & Rennie, 1999, p. 216). Further, "qualitative research allows for an in-depth understanding of the experiences and meanings individuals attach to a particular phenomenon" (Tierney et al., 2011, p. 1235), and may provide insight into the lived experiences of university students participating in mental health physical activity interventions on campus.

1.5.6 I Move My Mood Program Context. In Ontario, mental health physical activity interventions (MHPAI)s are being offered at some universities, however not all of these interventions have been publicly evaluated (Council of Ontario Universities, 2017). IMMM is an example of one of these MHPAIs The IMMM program provides students who are experiencing symptoms of anxiety and/or depression with the opportunity to improve their mental health and wellbeing through exercise or a recreational activity for up to 10 weeks. Students are referred from a counsellor and this intervention can be used in conjunction with other care they are receiving. IMMM participants in this program are given free access to a physical activity resource including but not limited to group exercise, rock climbing, or exercising in a gym setting. The students are given the option to attend the chosen activity with a peer volunteer to help ease integration into the activity and the cost of the program is free for both participants and peer volunteers of the program. The mixed results from previous mental MHPAIs warrants further investigation into the experiences of individuals in these programs. As suggested by McFadden and colleagues (2017) qualitative research may provide a deeper insight into quantitative findings and help to understand the experiences and meanings of individuals in the program. Therefore, the present research study used a qualitative investigation to better understand the lived experience of individuals in IMMM.

1.5.7 The Importance of Evaluation

The Mental Health Commission of Canada's national strategy recommends increasing "comprehensive school health and postsecondary mental health initiatives that promote mental health for all students and include targeted prevention efforts for those at risk" (Mental Health Commission of Canada, 2012, p. 20). Programs such as IMMM have been implemented on university campuses in Ontario for students who are experiencing mild-to-moderate symptoms of depression and/or anxiety. Although programs such as IMMM have been implemented on university campuses in Ontario, including Move Your Mind at the University of Waterloo and MoveU.HappyU from the University of Toronto, evaluation results, if they exist, have not been made public. As past mental health physical activity programming yielded mixed results in the university settings, a qualitative-based investigation would be beneficial, as McFadden and Colleagues (2017) reported rich conversations between physical activity counsellors and participants would have allowed for further understanding of their program's effectiveness. Bringing forth the voice of participants would yield additional information about the program, including its effectiveness and the potential role of peer support, as Bang and colleagues (2017) could not rule out the influence of peer support in their walking program. Further, incorporating the voice of participants and volunteers can allow for a deeper understanding of the program's quantitative findings, as it may reveal additional information beyond pre- and post-program depression and anxiety scores. Therefore, to understand the effectiveness of the IMMM program, it would be beneficial to evaluate the effect of the program on the participants and volunteers through qualitative research.

1.6 Purpose of Thesis

The purpose of this investigation was to explore the lived experiences of participants and volunteers in a 10-week mental health physical activity intervention (IMMM) at an Ontario university.

1.7 Research Question

What is the lived experience of the participants and volunteers participating in the IMMM program?

2.0 Overarching Worldview and Design

2.1 Constructivist Worldview

A worldview is a "basic set of beliefs that guide action" (Guba, 1990, p. 17). In particular, a researcher's worldview is a "philosophical orientation about the world" that arises based on discipline orientations and past research experiences (Creswell, 2013, p. 35). In the present study, the constructivist worldview was held, meaning that the researcher embraced the belief that individuals develop subjective meaning of their experiences that are "varied and multiple" (Creswell, 2013, p. 37). This led the researcher to ask open-ended questions with the goal of obtaining a variety of views and perspectives about a phenomenon. Further, it was believed that humans engage and make sense of the world based on their historical and social perspectives (Creswell, 2013). This meant that the researcher sought to understand the context or setting of the participants through gathering information personally, or gaining a first-hand experience of the phenomenon (Creswell, 2013). The researcher's own personal experience as a past participant in the IMMM program allowed for an understanding of the program and its context from a unique perspective. Further, the researcher's personal experience allowed for rapport to be built with the volunteers of the program during the collection of data via one-on-one interviews. To bring forth transparency and address researcher bias, the researcher participated in a one-on-one semi-structured interview that was analyzed prior to conducting the study and kept a personal diary throughout the study. Further, the researcher's personal experience was disclosed to participants at the beginning of the Qualtrics survey.

A constructivist worldview assumes that meaning is generated socially, and arises out of interaction within communities (Creswell, 2013). This made the process of research largely inductive and the researcher generated meaning from the information obtained in the field

(Creswell, 2013). Therefore, to understand the unique experiences of individuals within the IMMM program, the researcher employed an inductive approach where the volunteers and participants' voices were brought forward using qualitative interviews and an online questionnaire.

2.2 Heuristic Phenomenological Design.

A phenomenological design, or a design "in which the researcher describes the lived experiences of individuals about a phenomenon as described by participants" was followed to understand the experience of individuals, including the researcher, in the IMMM program (Creswell, 2013, p. 42). A phenomenological design was appropriate because the purpose of the study was to understand the IMMM program's effectiveness through understanding the lived experiences of individuals with past or current experiences in the program. Furthermore, a phenomenological approach was appropriate because it "culminates in the essence of experiences for several individuals who have all experienced the phenomenon", including the researcher, IMMM participants, and volunteers, and allowed the researcher to obtain a more holistic picture of the IMMM program's **effectiveness** (Creswell, 2013, p. 42).

Since the researcher was a past IMMM participant, a heuristic phenomenological design was followed, as "it requires that there is a personal experience that has left the inquirer with a desire to understand the experience more fully" (Kenny, 2012, p. 7). Heuristic inquiry is an autobiographical approach to qualitative research that is rooted in social constructivism and phenomenology (Sultan, 2018). For a layout of the qualitative design, refer to Appendix A.

3.0 Methodology and Results of Researcher's and IMMM Participants' Experiences

3.1 Organization of Section 3.0

To bring forward the researcher's experience and the experiences of the volunteers and program participants in IMMM, the present research study was conducted in two parts. First, the researcher detailed her own experience in IMMM through participating in a one-on-one interview with a PhD student who was experienced in qualitative research, and analyzing personal diary entries written while in the IMMM program. This allowed the researcher to reconstruct her experience in IMMM. This information is presented in the Methodology and Results of the Researcher's Experiences (page 21). Due to recruitment difficulties of IMMM participants, IMMM participants shared their experiences in the program through an online Qualtrics survey and their results were integrated with the researcher's experience. Next, the researcher brought forward the experiences of volunteers through conducting one-on-one semi-structured interviews. This information is presented in the Methodology and Results of IMMM Participants and Volunteers (page 29).

3.2 Methodology of the Researcher's and IMMM Participants' Experiences

3.2.1 Participants. To obtain an in-depth understanding of the researcher's experience in IMMM, the researcher reflected on her journey as an IMMM participant. Due to recruitment difficulties for IMMM participants, a Qualtrics survey was developed to bring forward their experiences in a shorter amount of time (5-10 minutes), while allowing them to remain anonymous. To obtain an understanding of the experiences of IMMM participants, IMMM participants who had a direct experience, past or present, in the program were recruited using purposeful sampling.

3.2.2 Research Tools and Procedure.

Face sheet. A face sheet was completed by the primary researcher prior to the first semi-structured interview. The face sheet obtained background information about the primary researcher's demographic information, information about mental health conditions, year of study, and workload (full versus part-time student status) (see Appendix C). Further background information was collected about IMMM participants at the beginning of the Qualtrics survey. The face sheet obtained background information about the IMMM participants and volunteers' demographic information, information about mental health conditions, year of study, and workload (full versus part-time student status) (see Appendix C).

Interview. Prior to the second part of the research study (i.e., data collection with other participants), the primary researcher participated in a one-on-one semi-structured interview to bring forward the researcher's personal experience in the IMMM program. This interview allowed the researcher to reflect on her experiences before, during, and after the IMMM program, as well as reflect on her own beliefs and potential biases after participating in the IMMM program. This interview consisted of open-ended questions that elicited the researcher's satisfaction with the program, a description of what physical activity was performed during sessions, the role of peer support provided by her volunteer, the program's role in the management of her anxiety and depression symptoms, and suggestions for program improvement (see Appendix D). This interview was conducted by a peer graduate student and analyzed by the primary researcher prior to the research study. In addition, the researcher analyzed her own personal diary during her time in the IMMM program and kept a detailed journal throughout the research project to help recall events and keep track of the researcher's perceptions throughout

the duration of the research project. One-on-one interviews were not conducted with IMMM participants because no IMMM participants were successfully recruited for an interview.

Personal Documents. To help recall specific events and timelines, the researcher used personal diary entries, email correspondents, and text messages from her time as an IMMM participant. This helped the researcher reconstruct the timeline and recall events appropriately.

Qualtrics Survey. Since attempts to recruit IMMM volunteers for a one-on-one interview were unsuccessful, an anonymous Qualtrics survey was introduced to the research study for IMMM participants. After providing informed consent, IMMM participants completed a 5 – 10-minute on-line Qualtrics survey (Appendix H) consisting of questions concerning relevant background information, their experiences in the IMMM Program, and program recommendations through a series of both closed-ended and open-ended questions. The survey and informed consent were completed online, and participant identities were anonymous. The survey remained open until April 30th, 2019 and allowed IMMM participants to share their experiences in the program in a shorter amount of time (5-10 minutes), while allowing them to remain anonymous.

3.2.3 Data Analysis: Thematic Analysis.

Qualitative data were analyzed using a phenomenological approach, or a research design "which the researcher describes the lived experiences of individuals about a phenomenon as described by participants" (Creswell, 2013, p. 42). The researcher's interview was recorded and transcribed verbatim and data were analyzed using thematic analysis, or "the process of identifying patterns or themes within qualitative data" (Maguire & Delahunt, 2017, p. 3552). Braun and Clarke's (2006) six-phase framework for thematic analysis was followed. First, the researcher became familiar with the data through reading the entire interview, and subsequently,

the researcher repeatedly read the transcript in an active manner to search for meanings and patterns. Second, initial codes, or "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon" were generated (Boyatiz, 1998, p. 63). This allowed the data to be organized into meaningful groups. Third, after the data were initially coded and collated, the codes were examined to search for themes which "represent a patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 10). Fourth, after a set of potential themes were generated, they were reviewed and refined to ensure the themes related to the research questions while cohering together meaningfully and have clear distinctions. Two levels of reviewing and refining the themes were conducted where the researcher first reviewed the coded data extracts for each theme and considered whether they formed a coherent pattern. Next, the researcher considered the validity of individual themes in relation to the data set, and whether the potential thematic map accurately reflected the overall meanings of the data set. Fifth, after the researcher identified the different themes, the themes were defined and named, and the 'essence' of what each theme is about was identified. Finally, sixth, the themes were written up into a thesis report, in a "concise, coherent, logical, non-repetitive and interesting account of the story the data tell – within and across themes" (p. 23). It is important to note that analysis was not a linear process, but instead a recursive process whereby the researcher moved back and forth between the stages, as needed (Braun & Clarke, 2006). Due to recruitment difficulties, the present research study did not reach data saturation for IMMM participants, as two IMMM participants were recruited and overlap was not observed among IMMM participant experiences. Since data saturation, or "when gathering fresh data no longer sparks new insights or reveals new properties", was not reached

for IMMM participants at the end of the research project, IMMM participants were recruited in an ongoing manner until April 30th, 2019 (Creswell, 2013, p. 239).

3.3 Results for the Researcher and IMMM Participants' Experiences

3.3.1 The Researcher and IMMM Participants' Journeys with I Move My Mood

In order to be fully transparent in the research process, it is important the researcher participates in reflexivity, or "the process that enables researchers to critically examine the nature of their work and how their assumptions, underlying values, and preconceptions affect the research produced" (Alley, Jackson, & Shakya, 2015, p. 427). As part of the reflexive practice, I detailed my experiences with the IMMM program, and my prior preconceptions and beliefs about the program prior to the research study. In an effort to alleviate stigma associated with mental illness, I also detailed my personal experiences with mental health. With the use of entries from my personal diary, a personal story I wrote about my journey, and quotes from a one-on-one interview I participated in with a PhD student, I detail in Appendix A, a summary of my personal experiences as a participant in the IMMM program. For a full summary of the researcher's experience in IMMM, please refer to Appendix A. The goal of the present research study was to bring forward the experiences of the IMMM participants and volunteers, however, recruitment challenges with IMMM participants did not allow the voices of the IMMM participants to be brought forward in detail. Recruitment included: posters, advertisements, referral, and through word of mouth from the researcher, program staff, and volunteers (see Appendix E for recruitment materials). After previous methods of recruitment for one-on-one interviews with past and current participants were unsuccessful, a Qualtrics survey was introduced to the research study. In total, two IMMM participants completed the Qualtrics

survey, and provided some findings to add to the researcher's voice in describing the experiences of participants in the IMMM program.

The Researcher and IMMM Participants' Journeys.

After a long struggle with both anxiety and depression, I was referred to IMMM from a school counsellor. My goal for the program was to learn how to exercise with proper form, become oriented with the school's gym and eventually feel comfortable enough to exercise there on my own. After I completed the intake and pre-test measures of anxiety and depression to get into IMMM, I was partnered with my buddy and we exercised together a total of 4 times in the program. Looking back, I feel like I was not given the full experience of the IMMM program and, as such, did not obtain all the benefits the program may have to offer. This is because I was unable to obtain personal training sessions, and only participated in the program for 3 weeks, and a total of 4 sessions. When reflecting on my exercise sessions, there were many cancellations between my buddy and I, and I found our exercise sessions to be good, but not quite challenging enough. My post-test measures for depression and anxiety decreased after completing the program, however, I was unsure whether it was due to the program, or due to completing the measures during a less stressful time. Looking back at my experience in IMMM, the program provided me the opportunity to exercise with a buddy which made me realize the importance exercising with a partner. Further, the program helped me realize physical activity was important to me, and something I wanted to continue doing. After IMMM ended, I lost contact with my buddy and found it difficult to exercise on my own. To help myself become physically active, I eventually found a new buddy to exercise with and invested in two personal training sessions to become comfortable in the gym. This allowed me to start being physically active again. Overall, I was happy the program was a step forward with my treatment and I felt like I was starting to

"take control" of my life again. Learning how to incorporate exercise into my daily life helped me add another management strategy to my existing coping mechanisms, and this program helped me understand the importance of physical activity in my life.

When looking at the experiences of the IMMM participants who completed the Qualtrics survey, the IMMM participants appeared to have contrasting experiences in IMMM. Both IMMM participants decided to give IMMM a try to help them manage mental health and stress while in school. Katie discussed reasons for becoming involved in the IMMM program and appeared to be motivated to engage in physical activity:

> *Being previously [highly active], moving to university caused a shift in my overall health. Mental and physical. I knew that working out made my happy and being overall healthy made me incredibly joyful and calm as well, but I found it hard balancing everything thrown at me in the first couple months of first year. I recognized that my mental health was deteriorating, and I wanted to attempt to better it throughout the year. Knowing that being active kept me sane, and that I was not motivated enough to go to the gym regularly on my own time, I wanted to give IMMM a shot.*

Lola stated:

> *My counsellor recommended it to me, due to a lot of mental health situations and daily difficulty …. since school has started ~ Lola*

The types of activities IMMM participants completed contrasted the researcher's experience because both IMMM participants did group exercises with their buddies. When examining their feedback about IMMM, the IMMM participants had contrasting views regarding the activities offered in the program. Lola felt "there wasn't much opportunity to do different activities. It was a little repetitive" while Katie enjoyed the variety of activities offered through IMMM:

> *Overall, it was a great program with a lot of variety. It works hard at making sure its participants are involved and happy with what they're doing. ~ Katie*

Among the two IMMM program participants, one indicated meeting with the volunteer "4 to 5 times" in total during the program, while the other stated:

> *"Often times once a week with my buddy. However, there were times we went twice a week, and even times I went alone for 3+ times a week" ~ Katie*

When looking at the IMMM participants' satisfaction in the program, one was 'somewhat' satisfied with IMMM. When explaining the response, it was indicated the volunteer did not engage in much conversation as was hoped for, and building a relationship was nonexistent:

> *I feel I didn't gain as much as I was expecting. My buddy didn't talk to me that much .... I feel like it could've been better, as I would meet up with my buddy 2-3 minutes before a class or exercise we wouldn't talk and then we would leave. it felt quite awkward ~ Lola*

Lola also mentioned that allotting time to be able to communicate with their volunteers would be advantageous:

> *"[...] and make more time to be able to communicate with your buddy so it isn't awkward" ~ Lola, participant*

In contrast, the other program participant was satisfied with the program and got along well with the volunteer:

> *"My "buddy" was incredible. [My buddy] was so kind and motivating, and ... really helped pull me through to the gym" ~ Katie*

Overall, the two IMMM participants who completed the Qualtrics survey appeared to having contrasting views regarding their experiences in IMMM, warranting further investigation. Comparing these participants' experiences with the researcher's experience, further investigation into the experiences of IMMM participants during and after the program would allow for a better understanding of the program's implications. Additionally, recruitment difficulties with this population warrant the collection of data in anonymous and time-effective ways, in addition to one-on-one interviews.

4.0 Methodology and Results of Volunteers

4.1 Qualitative Design

As mentioned in section 2.2, a phenomenological design, or a design "in which the researcher describes the lived experiences of individuals about a phenomenon as described by participants" was followed to obtain and analyze the participant experience in the IMMM program (Creswell, 2013, p. 42). For a layout of the qualitative design, refer to Appendix B.

4.1.1 Participants. To obtain an in-depth understanding of the experiences in the IMMM program, volunteers (individuals who are paired with participants to provide social support throughout the program) who had a direct experience, past or present, in the program were recruited using purposeful sampling. In addition, to understand the program from different perspectives, participants recruited for the study was opened to any past or current volunteer or coordinator in the IMMM program. The specific types of purposeful sampling employed included: (1) criterion sampling or selecting individuals who meet a specific criteria and (2) snowball sampling or selecting research participants through referral by volunteers and counselling centre staff (Creswell, 2013). Recruitment included: posters, advertisements, referral, and through word of mouth from the researcher, program staff, and volunteers (see Appendix E for recruitment materials). Volunteers met the following inclusion criteria: (1) being a past or current student volunteer in IMMM program, and (2) have provided active, informed consent to participate in the study (Appendix F); or (1) being a student or staff member who coordinates, or has coordinated the IMMM program, and (2) have provided active, informed consent to participate in the study (Appendix F).

4.1.2 Research Tools and Procedure

Face Sheet. A face sheet was completed by the volunteers prior to the first semi-structured interview to provide the researcher with context prior to the interview. The face sheet obtained background information about the volunteers' demographic information, information about mental health conditions, year of study, and workload (full versus part-time student status) (see Appendix C).

Interviews. One-on-one semi-structured interviews were used to obtain an in-depth understanding of the volunteers' experiences in IMMM (see Appendix G). The volunteers engaged in one or two one-on-one interviews, depending on whether the volunteer was currently engaging in the program (two interviews) or had a past experience in the program (one interview). Among volunteers who completed two interviews, the first interview occurred upon starting the program, the second after program completion. The volunteers who participated in one interview completed the interview after finishing the IMMM program. The interviews occurred at a time and place convenient to the interviewee and were conducted in person, via Skype, or via telephone. Each interview was an average of 40 minutes long, ranging from 23 minutes to 60 minutes; however, the length of the interview varied depending on the answers provided by volunteers.

For the volunteers participating in two interviews, the first interview consisted of open-ended questions that elicited their reasons for participating in the program, their goals and expected outcomes, and their satisfaction as volunteers. The second interview consisted of open-ended questions that helped to understand their satisfaction with the program, the relationship between the volunteers and the buddies, a description of the physical activity performed during sessions, the volunteers' perceptions of their role in the program, and suggestions for improvement (see Appendix G). For the volunteers participating in one interview, it consisted of

open-ended questions that elicited their reasons for participating in the program, their goals and expected outcomes, and their satisfaction as a volunteer and with the program. Further, the questions brought forward the relationships between the volunteers and the IMMM participants, a description of the physical activity performed during sessions, the volunteers' perceptions of their role in the program, and suggestions for improvement (Appendix G).

Field Notes. Throughout the study, field notes were taken by the researcher, as they "aid in constructing thick, rich descriptions of the study context, encounter, interview, focus group, and document's valuable contextual data" (Phillippi & Lauderdale, 2018, p. 381). Field notes were used to document contextual information to increase rigor and trustworthiness, as well as to inform the data analysis process. Information, including researcher impressions, descriptions of the physical environment, and supplementary information during conversations, was recorded to aid in providing rich context. To obtain detailed field notes about the context of the study, field note recommendations by Phillippi and Lauderdale (2018) were followed. The researcher took field notes prior to, during, and immediately after each interview, and on a continual basis throughout the study. These were used to provide contextual information about each interview to aid in data analysis, and keep track of any researcher perceptions throughout the research process.

Reflexive Journaling. Prior to the research study and throughout the entire research process, the principal researcher kept a detailed journal to facilitate reflexivity: "the process that enables researchers to critically examine the nature of their work and how their assumptions, underlying values, and preconceptions affect the research produced" (Alley, Jackson, & Shakya, 2015, p. 427). Within the reflexive journal, the researcher detailed her experiences with the IMMM program and her prior preconceptions and beliefs about the program which helped to

inform the researcher's interview and data analysis. Further, reflexive journaling was used throughout the research process.

4.1.3 Trustworthiness. To establish trustworthiness, the researcher attempted to satisfy the four criteria of trustworthiness outlined by Lincoln and Guba (1985), including (1) credibility, (2) transferability, (3) dependability, and (4) confirmability.

Credibility. To enhance the study's credibility, or the accuracy of the descriptions and interpretations of human experience, peer debriefing, triangulation, and member checks were conducted (Connelly, 2016; Guba, 1981). Peer debriefing occurs when the researcher discusses "their work with disinterested peers and requests their engagement to question the researcher's work in a consistent and systematic fashion" (Poduthase, 2015, p. 26). Furthermore, materials including voice recordings of interviews and written field notes were collected to allow findings and interpretations to be stored and referred to during analysis (Guba, 1981).

Member Checks. Each respective transcript was sent to volunteers in the form of a member check, or a follow-up with research participants to verify the transcript reflects the volunteers' intended meanings (Lincoln & Guba, 1985; Patton, 2001). Member checks gave the volunteers the opportunity to "correct, amend, or extend" (Lincoln & Guba, 1985, p. 236) information on their transcripts to ensure they are comfortable with the use of this information in future research papers, posters, or presentations by the primary researcher. Furthermore a member check ensured the researcher's ethical responsibility to accurately reflect each volunteer's lived experience (Kornbluh, 2015). Volunteers were provided three-weeks to complete the member checks, and if they failed to complete their member check within the specified time period, data analysis proceeded with the original transcript. Of the eight

volunteers who participated in the research study, five completed member checks while three did not complete member checks and the original transcript was used.

Triangulation. Triangulation, or "the use of multiple methods or data sources in qualitative research" (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014, p. 545) was used to develop a comprehensive understanding of the effectiveness of the IMMM program. In particular, methods triangulation, investigator triangulation, and data source triangulation were employed throughout the study. Method triangulation, "involves the use of multiple methods of data collection about the same phenomenon" (Carter et al., 2014, p. 545). The multiple methods of data collection employed in the research study include background questionnaires, interviews, field notes, program data, and survey-based data. Investigator triangulation provides multiple observations and conclusions from the involvement of two or more researchers in the study (Carter et al., 2014). Analysis of the interviews were conducted by the principle researcher and two supervisors separately, and findings were supported or challenged to add breadth to the phenomenon of interest (Carter et al., 2014). Data source triangulation, or the "collection of data from different types of people" (Carter et al., 2014, p. 545) was employed to gain multiple perspectives and validation of the data. Interviews were conducted with both past and current volunteers of the IMMM program to gain a holistic perspective of volunteers' experiences in the program.

Transferability. To enhance transferability, or the degree to which results can be transferred to other samples, purposeful sampling and thick description were employed (Connelly, 2016; Guba, 1981). Purposeful sampling allowed the researcher to choose research participants who were "information rich" (Guba, 1981) to maximize the range of information uncovered about the effectiveness of the IMMM program. Furthermore, descriptive data were

collected, and thick descriptions of the study context was recorded via detailed field notes to assist the researcher in understanding the setting and context of each interview (Guba, 1981).

Dependability. To enhance the dependability of the study, or the stability of the data over time, stepwise replication, and an audit trail were used (Connelly, 2016; Guba, 1981). Stepwise replication was used such that the interview data were analyzed separately by the researcher and supervisors, and the results of analysis compared. An audit trail, in the form of notes and track changes, was established to keep record of how the data were collected, analyzed, and interpreted (Guba, 1981). This enhanced the dependability of the study through maintaining transparency and allowing others to understand how the research and analysis was conducted.

Confirmability. To enhance the confirmability or the degree to which the findings are consistent and could be repeated, triangulation and reflexivity were utilized (Connelly, 2016; Guba, 1981). As mentioned above, triangulation in the form of methods triangulation, investigator triangulation and data source triangulation, was used to ensure a comprehensive understanding of the effectiveness of the IMMM program and to ensure consistent findings across qualitative and quantitative data (Guba, 1981). Reflexivity, or the practice of intentionally revealing the researcher's underlying epistemological assumptions and relationship to the IMMM program, was engaged in to address potential biases and influence of the researcher (Guba, 1981).

4.1.4 Data Analysis: Thematic Analysis. Qualitative data were analyzed using a phenomenological approach. The data from the background questionnaires provided a framework for interview questions and provided context for the researcher. Further, while reviewing transcripts, both the background questionnaires and field notes were used to provide additional context for the researcher. Field notes were used throughout the data analysis process

to help the researcher understand particular phrases, reactions, and emotional responses that occurred within the interviews, thus allowing for a better interpretation of volunteers' stories.

Interviews were recorded and transcribed verbatim and data were analyzed using thematic analysis, or "the process of identifying patterns or themes within qualitative data" (Maguire & Delahunt, 2017, p. 3552). As in the previous chapter, Braun and Clarke's six-phase framework for thematic analysis (2006) was followed and the researcher analyzed the data within each group before proceeding to analyze between each group (see Table 1, p. 36). Analysis was a recursive process whereby the researcher moved back and forth between the stages, as needed. Creswell (2013) recommends the number of participants in a phenomenological study should typically range from three to ten participants, or to collect data until data saturation is reached. Data saturation was reached for all eight IMMM volunteers because data were collected until no new information was obtained and further interviews would not enhance or add new data, themes or codes to the research (Guest, Bunce, & Johnson, 2006; Patton, 2001). Additionally, these themes were present in the broader literature, indicating replicable data (Guest et al., 2006).

Table 1. Braun and Clark's (2006) six phases of thematic analysis.

Step 1: Become familiar with the data
Step 2: Generate initial codes
Step 3: Search for themes
Step 4: Review themes
Step 5: Define themes
Step 6: Write-up

4.2 Qualitative Results for Volunteers

4.2.1 Introduction to Participants

This study comprised ten research participants: two IMMM participants, and eight volunteers from the IMMM program. Of the ten research participants, two indicated personal experiences with both depression and anxiety. Treatment strategies for these conditions included antidepressant medications, psychotherapy, mindfulness and exercise. The length of time as a volunteer in the program ranged between 1 and 3 academic years. For a summary of the demographic information for research participants, please refer to Table 2 (p. 37). For confidentiality purposes, the data for both IMMM participants and volunteers was shown together.

Table 2. Demographic information for the volunteers and participants in the IMMM program (n = 10).

Variable		Mean (SD)	% (n)
Age		22.25 (±2.43)	
Gender	Male		0.09 (1)
	Female		0.90 (9)
Level of study	Undergraduate		0.70 (7)
	Graduate		0.30 (3)
Number of academic years in program		1.3 (±0.48)	

Table 3. Themes and subthemes of the lived experiences of volunteers and participants of the IMMM program.

Theme	Subtheme(s)
1. Lack of Role Clarity	i. "What can I say?" What do I do? ii. "Partner versus personal trainer"
2. Did I Make a Difference?	i. What success can look like ii. "Work to be done"
3. Eyes Opened	i. Everyone has a story ii. Resources available iii. Valuable skills

4.3 Themes

Volunteers reflected on their experiences in the IMMM program. A total of three themes emerged from the analysis of data: (1) lack of role clarity, (2) “did I make a difference?”, and (3) eyes opened. Theme 1 addresses the support role the volunteers played throughout their time in the IMMM program and the lack of clarity they perceived with their role. Theme 2 addresses the perceived influence the volunteers had with their participants and some of the improvements suggested for the program. Theme 3 addresses the volunteers’ outlook on their experiences in the IMMM program. The themes and their respective subthemes are summarized in Table 3, p. 37. Each will be discussed in turn.

4.3.1 Theme 1: Lack of Role Clarity

In the interviews, the volunteers reflected on their experiences with the volunteer training, the role expectations that were outlined by program staff, and the role they fulfilled while exercising with their participants. When reflecting on their time in the IMMM program, some volunteers mentioned feelings of uneasiness when interacting with their participants, discussed challenges in knowing what to say/do in actual or possible scenarios, and talking about their participants’ mental illnesses. Additionally, some of the volunteers found it difficult to balance supporting their participants’ needs while keeping a “professional distance” being an exercise buddy and “not a trainer” or “counsellor” to their participants. These feelings of uneasiness and lack of clarity regarding the volunteers’ roles appeared to be linked to the volunteer training and the role expectations that were placed on the volunteers.

“What Can I Say?” What Do I Do?. All of the volunteers, with the exception of one, attended a training session that occurred approximately two weeks before the fall semester. During training, volunteers were provided with some background information on the program, taught how to deal with possible situations that might arise with their participants, and the

expectations regarding their volunteer roles. For example, Alex recounted the initial training as follows:

> *I remember we talked about mindfulness and how every participant is going to have some sort of background that we have to … respect, and not a lot of them will have a background in physical activity, which is the thing that most of us may be more experienced in or inclined in, so we kind of have to put our personal judgments aside, our biases aside …. and it's our job to make sure that person integrates into a physical activity environment properly and that they… stay a lifelong participant of physical activity. ~ Alex*

Charlie echoed Alex's sentiments and explained how volunteers were told they were not supposed to be their participants' friends, but rather partners at the gym:

> *I kind of learned more about the program, like to be honest I didn't really understand the program, how it worked, so I didn't know we got referred to one person for so many weeks, … so I learned more about that and how to deal with certain situations that may happen … and how like communicating with them, like your email or texting and how we're not their friend but we're their partner, and like how they want to be addressed if like one of their friends sees them, or one of my friends sees me … if they're like my friend or whatever ~ Charlie*

When asking Danielle to reflect on program training, the description of the training appeared to corroborate the other volunteers' perspectives:

> *So in the training, it's about an hour and a half … [they] go over basically everything that IMMM offers …. it's knowing how to act as a volunteer, knowing when you need to tell them to go see their counsellor … knowing when to call [campus police], so it's kinda giving different scenarios, so if they're ever in that situation they're prepared for it, knowing their boundaries of … how to talk to the student, and again if there's anything that needs to be addressed, to come and speak to [the program coordinator] immediately…. so how to approach those situations.*

Taylor highlighted the importance of maintaining a "professional distance" from participants and how volunteers were instructed to not counsel their participants about their mental health:

> *….and then it was kinda navigating their stressful times as well, so [not] crossing that line of like counselling them, but also like giving them a support system type of thing. You know that balance it's really hard, so I remember some sessions, like they'll start opening up and I'd be like "oh do you have a counselling session*

> *booked?" You know? Like the standard line of being like "oh deflect, deflect"…. like these are the lines you use when things start going sideways, right? Trying to balance supporting them but also making sure they are following up with the appropriate resources."*

Further, volunteers typically did not stay in contact with their participants to maintain participants' confidentiality and at the termination of the program, participants would "go off on their own in the gym" and were encouraged to continue exercising independently:

> *"[after the program, they are encouraged] to go with their friends, roommates, or if they meet people in classes, to use the facility" ~ Danielle*

When asking volunteers if training helped prepare them for their roles, there appeared to be mixed feelings regarding the training. Although some volunteers felt the training was effective, other volunteers lacked clarity about what to do in emergency situations and how to navigate supporting their participants while maintaining a professional boundary. This made some of the volunteers feel as if they were "walking on eggshells" around their participants. Among the volunteers who felt the training was adequate, Amy explained:

> *[The training] was pretty straight forward. I mean like I enjoyed that meeting because it was nice to see who else was volunteering and again, hear about their experiences so that part was motivating, and it was nice too to learn more about like mental health I guess, or just get a refresher, like "if someone is displaying these signs" like send them to the doctor, like walk with them to the health department" ~ Amy*

Similar to Amy, Beth explained how training helped put volunteers at ease if participants did not attend physical activity sessions at some point during the term:

> *... in terms of my expectations, like it, from what I thought it was going to be, it met everything, like I was told at the beginning when we had our training that I'd have participants, and they were very clear in our training [that] people won't show up … you have to remember that stuff's going on, so they might not show up ~ Beth*

However, not all volunteers felt training was adequate. For example, Emma explained having mixed feelings about the training:

> *Yes and no [regarding: training prepared you for your role], I think it was important to go through some of the stuff that we went through in the training, but for the most part I think you just went based on each participant because each person is very individualized, like each participant I find when you have your one-on-one meeting, like [program coordinator] and your partner, you kinda learn more about your partner, so like what their needs are and what their individual goals are, and then you kinda tailor, like the training was very generic versus when you actually meet with them, so I found it was more beneficial to do it one on one. ~ Emma*

Charlie explained how training was not adequate and was left feeling uneasy about what to do if a possible situation were to arise while exercising with a participant. Further, not every volunteer who entered the IMMM program attended the training session:

> *I guess like the training part, we only had like one training at the very beginning, also like my participant […] [struggled with a lot of health issues] [….] so I wasn't sure what to do if anything happened during our workouts, like I have first aid training, but [….] I wasn't sure how to deal with those issues if they do occur [….] but I wasn't sure like what I would do in that situation, I kinda felt like uneasy about the situation, because if it did happen it was kinda a big deal ~ Charlie*

Bridgette reflected on being debriefed about the volunteer role expectations by the program coordinator. In one of the interviews, Bridgette shared an experience with an IMMM participant that had a mental health-related issue. Even after being briefed on the role expectations, Bridgette expressed clarity was still lacking on how to balance supporting the participant during a panic attack without overstepping professional boundaries:

> *"Cause I was told not to be like "oh you need to go home and meditate" but like what can I say then instead?"*

Bridgette also lacked clarity on acting in the appropriate manner during these situations:

> *…. and then, just what to do in situations. What you can say? What you can't say? If you need additional support, I know [the coordinator], I email [the*

> *coordinator], but like in the moment like you can only do so much, like do we go to the [front desk], do we go to the office, like what do I do if we need help, like do we call [the campus police], you know what I mean? I mean I could guess on a bit of it, but like, to follow like the procedural stuff ~ Bridgette*

Additionally, throughout the interviews, feelings of uneasiness surrounding mental illness surfaced. For example, Bridgette explained the uneasiness about the attacks:

> *So actually … [my buddy's] had a [mental health-related issue], I'm not really sure what to classify it as? So that was kind of hard because we're not allowed to offer advice, because I'm not a therapist obviously, and things that work for me might not work for [my buddy], so it's like, 'take your time' [….] So it's just, things like that I completely get, but I don't know, like I wanted to take a step, but I didn't want to be liable for like doing the wrong thing.*

When asked about any issues experienced in the program, Taylor explained feelings of apprehension as a volunteer when participants cancelled exercise sessions:

> *[…] just one for me was that I never knew like the, like I don't want to sound, like the stability of the person that I was meeting with, because you never wanted to offend anybody or you never wanted to assume anything, so like when people keep consistently cancelling on you, you're like, "are you okay"?*

Beth also explained lacking clarity dealing with issues or talking about mental illness during exercise sessions:

> *…and then also I think just how to engage with someone that might having different symptoms when I was with them, I think I would have liked to have a little bit more on that, just cause I was, I felt a few times that I was walking on eggshells, just because I didn't know what to say sometimes, not that they were showing up with any big issue, but just being careful with my words, so I would have liked a little more training on that I think.*

When asking other volunteers how they supported their participants in the IMMM program, they appeared to maintain their professional boundaries by not talking about their participants' mental illnesses. For example, Amy explained:

> *We wouldn't ever really talk about their condition or anything, so it was never really emotional support. Sometimes we would chat about school, but it was very*

> *surface level, so really it was just the fact that they didn't have to do [exercise sessions] alone.*

Further, when asked how Emma supported a participant throughout the program, Emma echoed what Amy said:

> *I wouldn't say there was any real… other than having someone there that [my buddy] can be reliant on, so like for me because I was there, [my buddy] went, like that was the main thing. I don't really think that I could really give [my buddy] any advice or anything to do with [my buddy's] mental illness.*

Emma explained program rules about being a participant's friend:

> *You go to your exercise class and that's it, like there's no - you're not allowed to have their phone number, like you're not supposed to be there to be their friend really, like you make a friend, but you're not like out there doing things with them …. [I] can't go out and I can't have coffee with my partner. Like I can't learn really anything more about my partner other than spending that hour a week with them.*

When entering the IMMM program, the volunteers were taught to keep a professional distance from their participants, functioning as gym buddies rather than friends. This left volunteers lacking clarity on what to do and/or say around their participants and creating barriers for volunteers for communication and maintaining a professional distance with their participants.

Partner versus personal trainer. In the volunteer training, the volunteers were under the perception they were exercise "partners" with their participants and "not personal trainers". However, some of the volunteers were surprised by how much guidance and motivation their participants needed to become oriented with the recreation complex, to understand how to engage in physical activity, and to show up to exercise sessions. This left some of the volunteers lacking clarity and questioning their role as a partner or a personal trainer.

A typical exercise session. When reflecting on their time in IMMM, the volunteers appeared to participate in a wide variety of activities with their IMMM participants, such as rock

climbing, group exercise classes, yoga, swimming, and exercising in the school's gym. For example, Bridgette explained the variety of activities offered in IMMM:

> *So, the first time, we went rock climbing, and then everything was good, and then a week or two later, [my buddy] decided "oh I want to go to the gym", like workout…. and apparently on Tuesday we're trying group exercise class, I guess we're trying it all!*

Amy was able to experience both group exercise and exercising in the school's gym:

> *I was paired with someone that wanted to go to group exercise classes …. and that was yoga, bootylicious, like muscle pump, like all sorts of classes …. I was paired with someone again, the winter term …. [that buddy] wanted to work out in the gym and get more comfortable with the gym equipment.*

Not all volunteers experienced as much variety in IMMM. Beth explained why a participant chose to participate in one activity:

> *"Yah, so [my buddy] loved to go to yoga, so that's usually what we did …. I think we were going once a week was our plan usually, was to go to yoga and I think we stuck with that for most of the time and I don't think we really tried anything else. I think [my buddy] just loved the yoga so we just kept doing that" ~ Beth*

During a typical exercise session, volunteers typically met participants at the doors before entering the recreation complex. They would engage in physical activity with their participants, and part ways after exercise sessions. For example, Charlie recounted a typical gym exercise session with a participant:

> *Okay so we would meet in the [gym] like behind the gates, and then we'd go in together and get changed and all that stuff, and then we would go to like the main part of the [gym] with all the treadmills and the machines and we would typically do a warmup, so we'd start with like walking on the treadmill or doing the elliptical, or even like the bike, and then we would do that for about 20 minutes, and then we would go on the floor and we would do hand weights, or do our own little exercises, or even use some of the machines a little bit, it kind of really depended on what [my buddy] wanted to do… and then we would, we would just kinda end.*

Amy contrasted an exercise session in the school's gym with a group exercise session:

> *[At the gym], we'd meet in the lobby, go get changed, we'd go on the treadmill, or elliptical or something just to get warmed up, and again I wanted to make sure [my buddy] was like familiar with how to use those pieces of equipment… and then we'd go to the cable machine in [a section of the gym], because like [my buddy] was more comfortable there, and then we would do some sort of circuit of 5 to 8 different moves, depending on how much time we had… and, like I would just say "okay we're going to do this move next, do about 8 reps" and then I would just kinda watch, and then we'd switch sides or whatever, and then we would usually do a stretch to cool down and then same sorta thing, either just get changed and leave, or just leave and then chat as we were leaving ~ Amy*

> *[For group exercise] we would usually meet in the sorta lobby area of the [recreation complex], go down and get changed …. we'd go to whatever studio it was in …. and then we'd just chitchat until the class started, and then again, just like doing whatever the instructor was doing, but I would do it beside [my buddy] …. [After the class] we would probably talk for another like, I dunno 4 to 7 minutes and then [my buddy] would go on [their] way.*

Different to the other volunteers' experiences, Taylor explained how a studio room was booked to exercise with a participant:

> *So we would meet in the lobby of the [school's recreation complex] all changed and ready to go, and then we would go down to [a studio], whichever one I would book, and I would have a pre-made circuit, like a full body circuit that we would do, we would usually do like 20 seconds on, 30 seconds off, or 20 seconds on 40 seconds off and we would do 5 exercises and go through that 5 times… we would put music on the stereo and we would just have a good time …. it was usually quick, always done within like 30 minutes because we were both with the same vibe that we don't want to be here long, so it was always boom get in and get out ~ Taylor*

Further, Taylor described swimming with another participant in the IMMM program:

> *"We would go down to the change room to drop our stuff in a locker, go out to the pool deck, and it would be 40 minutes of just like lane swimming. So sometimes it would switch between [my buddy] swimming front stroke, and me - I was always just walking beside …. we would do dynamic things in the pool, like different types of things - we would do like running in the pool, just different things to be active but the whole time was just us chatting about different things …. So I would go for 40 minutes, and we would go back to the change room and then "okay I'll see you next week" and that was pretty typical ~ Taylor*

Need for guidance. During exercise sessions, five volunteers reflected on their participants' lack of knowledge and/or experience with physical activity or accessing the school's recreation complex. Bridgette shared:

> *"[My buddy] didn't know how to get into the gym and then one of the [front desk] people were like laughing at [my buddy], which is terrible."*

Further, Beth reflected on helping a participant with accessing the change rooms and increasing comfort with the athletic facility, a place the participant had never been to prior to IMMM:

> *I think I provided like a little bit of confidence for [my buddy] to feel comfortable going somewhere …. [my buddy] had never been before – like [my buddy] didn't know where the change room was the first day – so I was able to like provide [my buddy] with the comfort of like, I was a familiar face after we had met a couple of times and [my buddy] felt comfortable going into the change room with me.*

In addition to having issues accessing the facility, Bridgette described believing a participant did not have the physical activity knowledge and/or experience to know about choosing physical activity goals during the initial interview:

> *…I don't want to sound negative, but I found it difficult when … asking my participant their goals, and my participant really had no idea what their goals were in terms of physical activity, and there was just like an awkward silence, so then I tried to like throw out some ideas, like you know "do you want to become more comfortable in the gym? Wanna like build strength?"…. so it was just like I hated the awkward silence, not just because I like hated it for me, but I like hated it for [my participant], so it was just kind of like maybe like prompts for questions just so […] like they might not always know what to say ~ Bridgette*

During their first group exercise session, Bridgette noticed a participant was nervous entering the group exercise class and appeared to be less physically fit than the rest of the class:

> *I could tell [my buddy] was pretty nervous entering [group exercise], and I think cause [my buddy] seemed a bit less fit than other people in the class which was challenging for [my buddy] …. I think [my buddy] liked it so [they] just needed time to warm up …. yah and it was also my first time which is exciting cause I felt like I was on [my buddy's] level, so I'm like "yah this is going to be the both of us."*

Similarly, Charlie explained gym exercise sessions were difficult because Charlie's partner required guidance throughout the workout:

> *[My buddy is] kind of like waiting for me most of the time, but like [my buddy]… I'm trying to be… I'm like, "okay let's do this", like, "what do you want to do", not what I want to do, and [my buddy's] like "you tell me", but that's not my job… if it's your partner.*

Although this role was not outlined in the volunteer training, one of the volunteers described the need to take on a teaching role during sessions because a participant did not understand how to build an exercise plan. Taylor stated:

> *I would say more of like a mentoring role and like teaching how to be active and how to build circuits and why to do different things, because [my buddy] had always wanted to be active and … always had trainers in the past but [my buddy] just didn't understand why [my buddy] was doing certain things.*

Since some of the participants required more guidance than the volunteers had anticipated, some volunteers lacked clarity on how much of a leadership role they should assume during exercise sessions. For example, three volunteers were surprised by how much of a "leadership role" they had to take on in this program. These volunteers had expected to workout alongside their buddies and have an equal partnership, rather than functioning as personal trainers. For example, Charlie stated:

> *[My buddy] doesn't go to the gym at all, so when I first was with [my buddy], [my buddy] kind of treated me as [a] personal trainer, but I'm not, I'm [a] partner, so I think [my buddy] was kind of expecting me to like tell [my buddy] what to do, but I'm just there to be [a] support system, so that was a bit challenging for me.*

Further, Charlie explained concerns with being a "personal trainer":

> *I get that I'm there to support [my buddy] and everything, but I didn't like expect to actually have workouts like pre-planned because that's what [my buddy] like wanted me to do basically and I'm not a personal trainer, so like I didn't want to like do that because I didn't… I don't have the qualifications ~ Charlie*

In addition to Charlie's concerns, another volunteer expressed concern with other volunteers knowing how to facilitate physical activity sessions:

> *Maybe like, for me, my participant wanted me to like work- or like go through a workout program, which like I'm good at, but for example, one of my roommates would have no idea what to do, who is like a volunteer ~ Bridgette*

Among the volunteers who found themselves taking on a "personal trainer" role, Amy explained how an IMMM participant's workouts were structured according to individual goals:

> *[My buddy] wanted to work out in the gym and get more comfortable with like the gym equipment. …. We did a bunch of cable workouts because [my buddy] wanted to get used to using that machine, and then again we tried to meet once a week, and I would just sorta watch [my buddy's] form and I was more of a trainer in that sense…*

Amy also explained training IMMM participants prevented volunteers from participating in the workout and function as buddies:

> *Sometimes I would do [the workouts] with [my buddy], but, and this is my own personality because the I Move My Mood program is supposed to be that you're buddies, you're not, I'm not taking on the trainer roll, but because I am a trainer, I guess I kind of just naturally took that on, and I kinda felt funny just doing the workout beside [my buddy], but knowing that [my buddy] wasn't quite doing it right. So for me, I would have rather focused on [my buddy], cause I wasn't able to get a good workout in [when] I was focused on [my buddy] anyways…*

Although some volunteers felt uneasy or disliked taking on a training role, others enjoyed this aspect of their roles. For example, Taylor discussed how workouts were structured with a participant:

> *…so giving [my buddy] that information of like "hey, you just do these back to back, you're getting a conditioning portion – you don't have to go on a treadmill, and you're getting the strength component and it's fast, so this is really what you want to be doing to meet your needs."*

By the end of the program, Taylor was able to teach a participant how to build their own circuits and use this knowledge to exercise on their own:

> *"Near the end I would tell [my buddy] different body parts that we would want to hit, and [my buddy] would pick the exercises so [my buddy] would kinda gain the knowledge about how to build [their] own circuit" ~ Taylor*

In addition to exercising in the recreation complex, some volunteers were assigned to participate in group exercise classes with their participants. Although these volunteers still took on a mentorship and/or leadership role during exercise sessions, the volunteers found it easier to workout alongside their participants during group exercise sessions. The volunteers who participated in group exercises alongside their participants appeared to still provide their participants with support. For example, Amy explained supporting a participant throughout group exercise sessions:

> *...just like doing whatever the instructor was doing, but I would do it beside [my buddy] and sort of like, you know look over at [my buddy] once in a while and see how [my buddy was] doing - does [my buddy] look ... overexerted? Does [my buddy] look nervous? Does [my buddy] look like [my buddy is] having fun? .... I would just sort of encourage [my buddy] based on whatever I thought that [my buddy] was experiencing .... I wanted to make sure [my buddy] was learning properly, but in that setting it was more-so just that [my buddy] just wanted emotional support, like a social support there.*

From the perspectives of the volunteers, it appeared participants entering the IMMM program may not have been equipped with the knowledge and/or experience to access the school's recreation complex and/or know how to formulate their own physical activity goals. Overall, the volunteer perceptions were that their participants relied on the volunteers to help orient them to the facility, make them comfortable setting foot in the new environment, and helping them to start becoming physically active and/or make an exercise plan. Since many of the participants required assistance, the volunteers found themselves taking on more of a leadership role than they initially anticipated. This demonstrated the divide between the

volunteers' expectations of being partners with their participants versus "leading" or "training" their participants.

4.3.1 Theme 2: Did I Make a Difference?

Theme 2 reflects the mixed perceptions the volunteers had regarding their influence with their participants during IMMM. Some of the volunteers described the changes witnessed among their participants and exemplified "what success can look like" in the program, while other volunteers did not experience this. Some of the volunteers felt they made a difference and saw changes in their participants, or contributed to a greater cause, while other volunteers felt that the program was not as effective as they had hoped. Among the volunteers who felt their participants were unsuccessful in IMMM, it was suggested there was still "work to be done" on the program to help more participants succeed. Additionally, some volunteers provided possible reasons the program was not effective for their participants including having less time in the program and engaging in less physical activity than they had anticipated.

What Success Can Look Like. Some volunteers reflected on how they made a difference in someone else's life through being involved in the IMMM program and felt they made a positive contribution to a good cause. For example, Beth reflected on a participant's success in the program:

> *It was more rewarding for myself than I kind of expected in the beginning, I thought I was just gunna be going and getting some extra exercise, just being with a participant, but it was like super rewarding by the end, because I remember at one point like I had talked to … the student that was organizing all of it and I had said something about my participant, [the student said], 'oh yah I heard [your participant] went with another participant' and they went on a walk together or something, and I was like wow that was really nice to hear that [my participant] went from literally square one with me, that [my participant] hadn't even been to the gym and didn't engage in any sort of exercise, to the point now that [my participant is] like doing exercise on [their] own time and [my participant] wants to exercise. So I think that made me feel really good like I must have had a good*

> *experience with [my participant] and [my participant] must have enjoyed [their] experience with me ~ Beth*

Danielle also explained how the program was "rewarding":

> *It was just a really rewarding factor knowing that I was able to help out another student become more umm affiliated into the [recreation complex], and like having …. them use that stepping stone where they want to use physical activity because I know it's something important to me, so I hope it will work for somebody else as well, because it does help with not only mental health but also other diseases and like factors that all like coincide together, so it was rewarding feeling to have that and like my goal was to make sure that you can use this facility on your own and you feel just as confident as I do walking in here which I think I was able to do ~ Danielle*

All volunteers attended a final meeting with their IMMM participants. In this meeting they met with the program coordinator and went over their participants' goals, satisfaction with the program, and suggestions for program improvement. Danielle explained:

> *It's been extremely rewarding to see how these [participants] have gone from having low confidence and self-esteem to being so confident and comfortable in [the recreation complex] ~ Danielle*

Taylor explained how IMMM was worthwhile due to the growth observed in participants:

> *[I would rate my experience] a 10, the best thing for me is the growth you see afterwards, like before I didn't see you talk and now you're excited about different things and I think I was at the gym one time and [my buddy] was there and I think it was 2 weeks after the program, [my buddy] was there with [my buddy's] friend and [my buddy] was like "[Taylor] I'm at the gym!" I was like wow that's so awesome, when you just see them trying and they want it like that's so awesome and you just feel really good for them. …. I think what I will take away most is how I impacted other people and how… like some of the success stories I got out of it were amazing, like [one participant] who had never worked out ever in [their] life, and like [the participant] … found me on Instagram and sent me a photo … doing chin-ups at the gym! Like are you kidding me? You didn't do anything before and now you're back home… doing chin-ups at home, so just the impact that you make on people, it's really amazing.*

Beth explained a participant's success in the IMMM program with the following two quotes:

> *…. [my buddy] really stands out to me in my mind, …. it might be subtle to other people like [my buddy's] improvements and the changes [my buddy] had, but to*

> *me it was like huge from the very first time I met [my buddy], like [my buddy] really embodied what the program was meant to do.*
>
> *I loved [the yoga classes]. It was something new for me and I enjoyed going and just seeing all the different things that they would teach us, and I like really progressed by the end, like I could see myself and my buddy even, you could see like simple things that we couldn't do at the first session, like downward dog [my buddy] had struggled with the first day, and then was able to do it no problem ~ Beth*

Danielle witnessed a participant continue exercising after IMMM:

> *"it was kinda a good starting point for that participant to start going to classes on their own, and using the facility on their own …."*

Not all of the volunteers experienced as much change in their participants as they would have hoped. However, even though some of the volunteers did not see as much change in their participants, they were still happy to volunteer in the IMMM program because they saw other improvements within their participants. For example, Taylor reflected on another participant's success in the program and explained the participant was "taking steps in the right direction":

> *I try not to have expectations going in for them because it's very hard to say like, 'I expect you to do this' …. like the goal is to get them to go independently all the time, and I guess like 'oh you're going to have the best world ever, you're going to be a full exerciser' and that didn't, we didn't get to that point. I did get to a point where [my buddy] had a friend in the program as well, so I did get to a point where they would go together, it wasn't consistently though, but it was a step in the right direction, but I guess it wasn't the most successful participant I ever had ~ Taylor*

Other volunteers also felt their experiences in IMMM was worthwhile because they felt they were still making a difference. For example, Alex explained:

> *You know if there's 10 – 15 people that tried this program, and you know maybe 5 of them have made some sort of concrete change in physical activity, you know then, five people is still like, it's still a lot, and in the span of 3 months, that's such a big change.*

Further, Emma explained being involved in IMMM helped benefit other people:

> *I feel that, like I enjoyed being able to participate in something that like I know is benefiting people, like I know in my life I have people that are struggling with*

> *mental health issues and it's really nice that you can make a difference and help these people, so that's what I find beneficial for myself.*

Even though Bridgette's participant was not successful in the program, this volunteer enjoyed being involved in the program:

> *"…. selfishly I like the feeling of being rewarded afterwards, and just like knowing that something I did like made an impact on someone else's day, or the potential fitness journey that could arise."*

Some of the volunteers felt the IMMM program was successful for IMMM participants because they witnessed change and were able to contribute to a greater cause. This exemplified "what success can look like" in the program. Further the volunteers felt they contributed to a greater cause, allowing them to feel as if they made a difference and had an influence in their participant' journeys.

Work to be Done. Although some of the volunteers felt they made a difference in their participants' lives, other volunteers felt that the program was not as effective as they initially anticipated. The participants' successes in IMMM appeared to be linked to the volunteers' perceptions of program goals. Additionally, among the volunteers who felt the program was ineffective, they pointed to having less time in the program, less physical activity, and having no follow-up as possible reasons for these feelings. They suggested there was still "work to be done" to help participants be successful in IMMM.

Differing perceptions of program goals. When asking volunteers about the goals of the IMMM program, three main goals of the program appeared to be outlined, which included (1) to help their IMMM participant "become more confident and comfortable in [the recreation complex]"; (2) to "use physical activity as a way to improve [students'] mental health",

specifically “depression and anxiety”; and (3) use the program as a “stepping stone” to engage in physical activity “independently” and “on their own”. For example, three volunteers explained:

> *“It’s just a partnership with someone that is dealing with mental health just gets the opportunity to use physical activity as a way to improve their mental health” ~ Pat*

> *“[The program is for] people who are not comfortable in the gym and helping them to become active and using the benefits of physical activity to help moderate the symptoms of depression and anxiety” ~ Taylor*

> *“[The] program was created to kinda bring more students into [the recreation complex], but also help them to become more mentally well in addition…. [the] end goal for them after the 6 to 8 weeks is usually to hope that they go to the gym on their own, so they can feel comfortable in the [recreation complex], or go to the gym more often throughout the week” ~ Danielle*

These varying goal perceptions appeared to influence whether the volunteers felt their participants were successful in IMMM or not. For example, the sub-theme “work to be done” was reflected in the idea of volunteers perceiving they had less influence over participants. Amy discussed how expectations of having an influence over participants were not met:

> *I think, if I’m honestly reflecting, I thought that it would have… that I would have more of an influence, like I thought, you know, this person would come in and we would meet once or twice a week and I would see a big drastic change in like their mood because like they started physical activity, and all of a sudden, ‘oh my gosh I didn’t realize that this was here’, and you know, ‘I went from having moderate anxiety to having low anxiety’, right? Like obviously it’d still be there, but now I’m managing it way better. So, I was expecting to see more outcome, whereas, what I did see was just people getting more comfortable with the gym. They had a good time while they were there, but I don’t feel that I was a difference in their personality or their mood or anything from time 1 to time, whatever 7 or 8, except for maybe the fact they were more comfortable talking with me.*

In addition, Amy perceived the program did not help a participant’s mental health:

> *…so I guess, my expectation was to meet new people, check I did that; like to work out, I did that with one participant but not really the other… to help someone with their mental health, like kind of, but not fully… you know?*

Charlie also believed the program did not work for another participant. In contrast to Amy's view of a participant becoming more confident using the gym, Charlie did not see this:

> *I don't really think that it worked for like my participant, and I've actually talked to another volunteer and [the volunteer] also said that it wasn't as effective as we thought it would have been … I guess because the whole main goal of the program is to kinda get them to be more comfortable with going to the gym by themself and just working out and increasing their I don't know, but we just didn't really see that.*

Charlie also explained how other volunteers felt the program was not as effective as they thought it would have been, making them question "why they were volunteering in the program?":

> *"But again there needs to be like work to be done, because I've like talked to other volunteers and they definitely said it wasn't effective, like 'why am I doing this?'"*

In addition to Charlie's views, Bridgette felt that participants were unenthusiastic to attend exercise sessions and stated:

> *"[My friends and I] have found that most of their participants don't actually want to be in the program."*

At the conclusion of the IMMM program, some of the volunteers expressed their participants still required guidance before attempting to maintain physical activity on their own. Since participants appeared to be dependent on their volunteers for accountability to attend exercise sessions and social support during exercise session, the volunteers wondered if their participants were truly ready to exercise on their own. Two volunteers mentioned their respective buddy did not like to attend physical activity sessions alone. Taylor explained how after the program ended, a participant did not continue to exercise on their own. Taylor attributed this to the fact that the participant no longer had a volunteer to help use the facility and engage in physical activity:

> *Yah it wasn't that [my buddy] failed to meet my expectations, because for what [my buddy] did, like "oh this is amazing, we're doing so well" but it's kinda that*

> *[My buddy] didn't continue to go consistently on their own, but it's also kinda hard to expect that for someone when you've been that person for them ~ Taylor*

One possible reason the volunteers did not perceive having much influence over their participants as they anticipated could have been due a lack of program follow-up. After the completion of the IMMM program, participants and volunteers would stop contact to maintain the confidentiality and anonymity participants. For example, Amy explained:

> *I remember when I was doing training the second time, people were sorta sharing like a little testimonial like 'oh yah I'm coming back because you know the last participant I had, like I see them all the time now, like they're always at the gym' and I wanted to make that effect on someone else's life, but I don't know if the two I partnered with still go to the gym or not, like I have no idea, I didn't have any follow-up, so I would have liked to know if, you know are they continuing with their physical activity habits, was that helpful at all? Was it worth my time? That would have been nice to know.*

Are we reaching enough students? Three volunteers questioned whether the program was reaching enough students on campus. For example, Alex suggested having more participants in the program would be beneficial:

> *I feel like this is something I already suggested to the program …. I think I said if there was more volunteers than there are referrals, maybe the criteria they have for selecting referrals should be like widened a bit, just a bit, like I understand it's all a delicate process, so I don't know exactly what they would change, but maybe there's something.*

When asked about any suggestions for program improvement, Beth suggested helping any individuals with self-declared mental health concerns may be beneficial:

> *I think even opening [the criterial for referrals] up, like it would be hard, but opening it up to other people that have like self-declared mental health concerns or something, because not everyone has some sort of mental health diagnoses, so I think that's important for other people as well to have access to it.*

Similar to Beth, Amy expressed concern for requiring a diagnosis to access the IMMM program:

> *I think if people need some sort of diagnosis to access it, that's going to limit a lot of people. It's almost saying, "you need to get worse before we can like help you with this program" – before like physical activity can help you better. So I feel*

> *like if there's some way to make it more accessible to people that are feeling… new to the gym, or just stressed at all from school, just having some sort of buddy system is helpful. It also might be helpful to [have] maybe some sort of drop-in. Like, it's obviously nice to be able to workout with the same person every time, but maybe when someone's feeling stressed cause it's midterm time, and maybe they want to go to the gym but they're not set up with someone. Like, there's no immediate way, for them to seek the support when they need it. They have to like go through intake and then get paired with someone – that could take like 2 weeks! And then by that time, the midterm season is over and they don't need it anymore ~ Amy*

When asking Emma about referring more people into IMMM, the response was hesitant and had an opposing opinion to other volunteers:

> *I think [expanding the program referrals is] really dependent. Like some people are really not open to exercise as being a method to relieve like their mental health challenges, or whatever is going on like depression and anxiety, so I think it's wrong to refer them to the program if it's not something that they are interested in …. I don't think it's' right to say 'oh exercise is the cure for all people' because I don't think that's the case. It might be eventually, but I don't think initially it really is not where they want to be, it's not going to be good for them as far as their mental health goes, so I think yes it would be great to have more people in the program, if that is the way it went. I don't think it should be forced; I think it should just be something that comes naturally …. cause you can do a lot of harm, it's great when it works for some people, but sometimes it can cause a lot of harm for other people ~ Emma*

Although some of the volunteers expressed concern with reaching more students on campus, some changes were made to the IMMM program in order to reach more students on campus. For example, changes were made to the intake process and students were able to self-refer to IMMM and be referred through other campus support staff such as academic advisors and faculty members. Further, to reduce participant drop-out, the program condensed the intake and exit interviews and allowed volunteers to attend these interviews, rather than having participants attend a separate participant and volunteer initial meeting. Another program change was allowing participants the ability to expand their time in the program. If participants wanted to continue exercising, they should be given the option to expand their time in the program:

> *"Expanding the program out to referrals, some people kinda lose a week if they're sick or anything like that, so just having that option that they can expand it for the referrals" ~ Danielle*

Less physical activity than anticipated. "Work to be done" was also highlighted when volunteers and IMMM participants reflected on the duration and frequency of the program. For example, when entering the IMMM program volunteers anticipated exercising with their participants for a set duration of time, which would help their participants become physically active and improve their mental health. Volunteers felt that they did not engage in as much physical activity as they initially anticipated and the duration of time in the program was shorter than anticipated due to cancellations, scheduling issues and participant drop-out. These issues made some of the volunteers perceive the program was ineffective for their participants.

During the initial intake interview, some volunteers established they were going to meet with their buddies for 1 to 2 sessions per week. For example, Alex explained:

> *"I think we said we were going to meet once per week, but if it was something that [my buddy] felt comfortable with adding to [their] schedule, then maybe two times, but that was it."*

Some volunteers corroborated Alex's perceptions and stuck with a consistent exercise schedule throughout the program, while others did not:

> *We had a set schedule, and I think it was once a week when we would usually meet, just for one of the classes, sometimes, it was two times a week just depending on if we were both free, and I think the max was two times per week ~ Danielle*

> *"We were once a week, some days [my buddy] would cancel so we would go every two weeks, if things built up and then near the end" ~ Taylor*

One of the volunteers stated:

> *It always starts with once a week, usually, just because you know to push them into the door a little …. and then it'll go to one or two …. sometimes it does get*

> *challenging to schedule a time, but we encourage them that "if it doesn't work out, you can still go", right? ~ Danielle*

One of the volunteers felt that engaging in physical activity once per week was ineffective:

> *I don't think it was very effective, especially when we only met for a couple of weeks, I just don't think that was effective …. I think even if we were to meet once a week just to do our own workout and another time per week to get involved in, a group exercise or something, I think two times a week [would be more effective] ~ Charlie*

Some of the volunteers noted they did not participate in physical activity with their participants for as long as they were anticipating because their time was limited in the program. Factors that reduced the amount of time in the program included volunteers waiting to be paired with participants, cancelled sessions with participants, and participant drop-out. For example, one volunteer discussed not being paired with a participant during the first year in the IMMM program. Other volunteers also experienced delays in being paired with a participant. For example, Amy shared the following:

> *I think I was hoping to have a little bit longer of a relationship with each of these participants, so by the time that I was paired up with someone, I think it was close to reading week, if not after reading week, and then it, maybe it went into exams like one week, but they didn't want it to go too far into exams. So, I maybe had 6 or 7 weeks with each participant. It would have been, I think, much more effective for them to be a part of it longer, but I mean by the time people realize they have some sort of concern, and actually seek out help and then actually get paired up with me, it's already week 5, right? Like so I think my expectation was like, "oh yah week 2, I'm going to get paired up with someone", but I think in one case it was week 6… ~ Amy*

Similar to Amy, Alex was paired with a participant after midterm season. Alex recommended:

> *"If there's some way that people can be paired starting the second or third week of each semester than that would be good, because that's also the time when people have the least amount of work, so if they could have that physical activity in their schedule when they have a light schedule, then when they have a heavy*

> *one they could continue with it, you know? It's like in this case the first week I met with him was already midterm season" ~ Alex*

In addition to waiting to be paired in the IMMM program, volunteers who were paired with participants commented on the number of cancellations that also limited time in the program. It was mentioned during training that it might be difficult for participants to attend exercise sessions and the volunteers should expect cancellations; however, the actual number of cancellations left volunteers feeling they did not get a full program experience, nor did their buddies. When asked about any drawbacks to the IMMM program, Bridgette and Charlie stated:

> *I think, and like I understand why, but like cancelling often, so it was like hard on my schedule cause I would allot time for it and like I would be busy, and I'm like okay I could have like hung out with friends in this time, and like obviously I'd prefer to do I Move My Mood, but if I knew I wasn't going to be doing it, like sometimes I would walk to the [athletics building] and be like "okay, [my buddy's] not here" ~ Bridgette*

> *Some of the time [my buddy] would text me saying "I don't feel very well" or "I don't feel like it today" so I would just kinda encourage [my buddy] and say "oh we could do a shorter session" if [my buddy] would, even just to book another day during the week ~ Charlie*

Taylor reflected on the frustrations of being "stood up" many times in the IMMM program. This highlights the issue of cancellations that were experienced by the volunteers in the IMMM program:

> *... it was sometimes that [my buddy] would just cancel on me, like it's always disappointing when you get cancelled on, like I got stood up so many times! I can't tell you how many times I got stood up, like just waiting for somebody and then "alright they're not coming" and you give them like 20 minutes because you want to give them the benefit of the doubt, right? And I hate it, it was so bad ~ Taylor*

Taylor also discussed difficulty navigating the fine line between participants lacking interest in the IMMM program, and having a serious mental health concern:

> *... when people keep consistently cancelling on you, you're like, "are you okay?" .... because I know there could be something seriously wrong, or they could just be not answering their email, so you were kind of in that limbo phase, ... so that was one of the difficult things for me ~ Taylor*

Two volunteers pointed to communication issues they experienced in the IMMM program. Having a lack of communication made it difficult to connect with participants and schedule exercise sessions. For example, Emma explained how the confidentiality rules of the program created a communication barrier with a participant, delaying participation in exercise sessions:

> *I find the communication is a bit of a drawback sometimes, like you're not supposed to have each other's phone numbers, so I found especially with my first participant it was sometimes like we would go a few days – like if I had to cancel but then I wouldn't hear back from [my buddy] for a couple of days just because [my buddy] wasn't checking [my buddy's] email, unlike checking [my buddy's] text or something like that. So, the communication was a thing that was a drawback, I understand why they do it, but sometimes that was a problem.*

Bridgette had many suggestions to help with cancellations and increasing the duration of time in the program:

> *I think something that could be improved is doing like a number of sessions rather than a duration in time, because I felt like we did it for maybe 10 weeks, but I probably only met [my buddy] like 6 times, so I think [my buddy] didn't really get the full benefit of it and we also didn't have full closure, just because our last session I didn't expect to be the last session, so I don't know if [my buddy's] really comfortable going [to exercise alone] now or not… and also like the communication, I feel like there should almost be a rule, like 24 hours in advance to cancel with it just so, as much as it's like I want to exercise too, I also have my own life, and I know I'd be cancelling early if I had to, so it's just like.. that might be my participant rather than the program.*

Further, Bridgette experienced some issues with a participant cancelling exercise sessions without any notice. Bridgette often showed up to the recreation complex unsure whether the participant was going to attend exercise sessions, as no email confirmation was received before

scheduled exercise sessions. This made cancelled exercise sessions particularly frustrating, as there was no communication with the participant. Bridgette recommended:

> *I also didn't know if we could get their phone numbers rather than just email for quicker communication, but I don't know barriers or not. Like if I could like call them, and be like "are you here" instead of emailing, like what if [my buddy] doesn't have data? So like the communication was challenging.*

In addition to the cancellations experienced by the volunteers, some volunteers explained scheduling conflicts that limited the amount of time they met with their participants. Charlie experienced scheduling conflicts with a participant throughout the program and explained:

> *"I guess also scheduling around our availabilities [was challenging], like [my buddy] would have class until like 10 or I volunteered at another place, so it was just trying to work around each other's schedules was a bit difficult."*

Amy attributed scheduling as the primary reason for no longer volunteering in the program:

> *[My buddy] was quite busy and like our schedules, we had a hard time actually working things out, that would be obviously partially both of our faults, like I had a really busy schedule and that was when I realized, 'okay I probably shouldn't volunteer with this program' because if cancelled I would have no time in the week to reschedule ~ Amy*

Some of the volunteers also experienced participant drop-out. Beth reflected on an experience with participant dropout:

> *"So I was [with] one [participant] for the full time, and then I was paired with another one for a few sessions, and then [my buddy] just stopped showing up and we didn't really continue with that…"*

Beth contrasted the experience between two participants and explained:

> *I think the biggest thing was that [my participant] showed up to every session…. the fact that [my participant] was actually invested in coming made a huge difference, because when we talk about the other participant, like [that participant] just stopped coming which was frustrating… I know there was probably lots of things going on that contributed to that, but I appreciated that this participant like valued that I was taking time out of my day to come and … was invested in actually engaging in what we were doing ~ Beth*

Bridgette met with one participant a total of five times in the program. Although Bridgette experienced many cancellations with this participant and they only met a total of five times, Bridgette still considered expectations of the program were met:

> *"... my expectation was to get [my buddy] into physical activity, and [my buddy] did that every week, well every week that we met which was good."*

Given the number of cancellations and scheduling conflicts, some of the volunteers recalled exercising with their participants less than they anticipated. For example, Amy explained:

> *"Originally when I signed up I was like, yah I'd like to be paired with someone for .... like the full 12 weeks, but I really just did part of 2 winter semesters"*

Charlie also experienced fewer sessions than outlined in the program:

> *"So, I think we had to complete I think 8 or 9 [exercise sessions], but we only completed like 6 of them I think."*

Bridgette echoed Amy and Charlie's sentiments:

> *I felt like we did it for maybe 10 weeks, but I probably only met [my buddy] like 6 times, so I think [my buddy] didn't really get the full benefit of it and we also didn't have full closure, just because our last session I didn't expect to be the last session.*

Some of the volunteers reported engaging in less physical activity than they initially anticipated. Additionally, although the goal of the IMMM program was to increase the amount of physical activity the program participants were obtaining, some of the volunteers felt they did not obtain as much physical activity as they were hoping because they often modified their intensity to meet their participants' needs. When asking the volunteers their intensity during exercise sessions, Amy mentioned training a participant reduced the amount of physical activity the volunteers obtained, as depicted in the following two quotes:

> *I think I liked going to the group exercise classes because then I actually got to work out, whereas when it was in the gym, and again, this is my own way, but I didn't love it that I was just training [my buddy] cause I was like, 'well, like I'm volunteering and taking this time, I wish that I was at least getting a workout out of it' and I wasn't getting that, so I didn't love that part.*
>
> *I would do some things, I would still get some movement, so for [my buddy] it might have been a moderate or vigorous workout, whereas for me it was probably light.*

Similarly, Taylor explained the difference in intensity between volunteers and participants:

> *Well my intensity and [my buddy's] intensity were very different. So, for me, my intensity for the swimming was nothing because I was just walking back and forth, and I used it as a recovery session, because I had practice that night and had had practice the other day before, so I just used it as a muscle recovery, like cold water felt really good, versus we would get [my buddy's] heart rate up, [my buddy] would be running in the pool …. so I would say more moderate intensity for [my buddy], and then the elliptical like more intense…*

Although this was not a goal of the IMMM program, some of the volunteers felt their amount of physical activity did not change after participating in the IMMM program. For example, Charlie explained other factors motivated change in physical activity this semester, rather than the IMMM program:

> *I don't think it's really changed [amount of PA obtaining], I think maybe a little bit of an increase but I was already pretty active before I was in the program, and this term I definitely increased my physical activities but I don't think the program has changed that ~ Charlie*

Beth also explained how Beth's own physical activity did not change after participating in the IMMM program:

> *"Yah I think it was always a big part of my life, so I don't think in terms of actually engaging in physical activity anything actually changed."*

Overall, volunteers appeared to have mixed feelings of their influence over their participants in the IMMM program. Although some volunteers felt the program helped their participants, others felt that the program did not work for their participants and this appeared to

be linked to the varying perceptions of program goals. In particular, volunteers expressed their expectations regarding the amount of physical activity they would obtain and the length of time in the program did not appear to be met. Further having no follow-up with participants may have prevented an understanding of their motivations for entering, continuing exercise on their own, or dropping-out the program.

4.3.3 Theme 3: Eyes Opened.

All of the volunteers stated that participating in the program was a positive experience. The overarching theme of "eyes opened" reflects that every volunteer had their eyes opened in some way after participating in IMMM. After participating in IMMM, the volunteers had their eyes opened to the fact that everyone has a story, the resources available for those struggling with mental health issues, and the valuable skills gained from volunteering in the program. The theme "eyes opened" is discussed in more detail below.

Everyone has a story. Some of the volunteers had their eyes opened to the number of students struggling with mental health issues on campus and that students in the IMMM program have their own stories and hardships that may prevent them from being active. For example, Bridgette described gaining a new perspective on the number of individuals struggling with mental health issues on campus:

> *I think just kinda understanding that there's many people in our world and even in our school that have similar feelings, like obviously my participant and I are like very different but I can also see many similarities in us, and like obviously [my participant's] different but like I'm struggling too and it's like, we're all in this together.*

Taylor also reflected on how everyone has a story and other reasons may prevent IMMM participants from being physically active:

> *…. but you gain that perspective of that there's other reasons as to why they are not going to the gym and everyone has their own story and you can't put your own world on top of them you have to like listen to what they're world is and then help them within that, and it gave me more perspective that way.*

After volunteering for the program, Danielle gained patience and empathy for participants:

> *… it's definitely taught me personal things like patience, when you're dealing with mental health a lot of people like to stray away from that, so when you're dealing with these people, you've gotta be patient because you have no idea what someone else is going through, and that's not just within this program, it's also outside of the program, is when you're meeting other people it's just kinda helped me get more patience, and just kinda getting to know other people and what they're dealing with just the program they're in and what they're dealing with ~ Danielle*

Additionally, some volunteers had their eyes opened to the difficulty of becoming physically active and sustaining behaviour change. For example, Alex, reflected on gaining a new perspective after a participant dropped out of the program:

> *…I did expect that [my buddy] would continue the program, but that's not an expectation that I should have had with [my buddy], because not everyone has that capability. It takes multiple attempts, multiple tries for people to make concrete behaviour change in their life, especially one as big as this one, and especially at this age, you know? …. [My buddy] said [they] dropped out because of school, and [my buddy] didn't have the time to be physically active, which is fine …*

Alex also explained how the one exercise session with the participant opened Alex's eyes to how valuable it was to exercise with friends:

> *The one visit I had, or the one meeting I had with my participant, [they] seemed really thankful and pretty happy to have somebody to workout with, which is something I took for granted a lot, having people to work out with, or to, you know, be physically active with. It definitely adds another dimension to it, and it helps in many different ways, for both people.*

Bridgette explained how participating in the IMMM program led to the realization that not everyone is confident in the gym, which is something Bridgette took for granted before the program:

> *I feel like [my confidence in the gym is] probably the same but I now I feel like I understand that someone else's confidence might not be as high like at the gym, but I feel like mine has stayed the same.*

Some volunteers also had their eyes opened to the fact that physical activity may not work as a treatment strategy for everyone. For example, Bridgette explained:

> *Sometimes I find it challenging .... because I know [physical activity] works for me, and I have to understand that like that might not work for everyone .... so it's like 'yah, like go to the gym, it helps your mental health' but it's like, 'okay well maybe that like hinders some people's mental health' like, you know what I mean? .... like this helps my mental health, but like you have to like have an open eye that like it's such like a diverse illness that like it's not the same for everyone.*

Charlie explained the use of physical activity as a stress reliever and believed that it worked, however, Charlie realized physical activity might not work for everyone:

> *"... because for me personally, I know [physical activity] does work... and like it may not work for everyone, but I think it's a great option to try, and if it doesn't work then just find a new strategy" ~ Charlie*

After participating in IMMM, the volunteers had their eyes opened to the fact that everyone has a story and there are many students struggling with mental health on campus. They realized that participants may have their own, valid reasons for not engaging in physical activity and recognized that physical activity may not be an appropriate treatment strategy for everyone.

Resources Available. Volunteers had their eyes opened to the resources and supports available to individuals struggling with mental health as well as the physical activity services available on campus. One volunteer explained how the IMMM program opened their eyes to the services available for those struggling with mental health issues:

> *I think like [IMMM] at least opened my eyes to that there might be other services out there if I was ever dealing with something else in my life, the fact that I Move My Mood started and people that had gone to health services were getting referred to the program, like, to me that made me think that if I go or if I ever need anything like that, then I now know I can ask about something like that, if there is some sort of program that exists like that for myself, so I think it just*

> *opened my eyes that there are other programs out there and it's okay to ask about them ~ Beth*

Further, some volunteers expressed participating in IMMM allowed them to step outside of their comfort zone and try different activities within the recreation complex. For example, Bridgette discussed how the IMMM program allowed volunteers to try new programming:

> *It was like fun for me too because like I said, I go to the gym by myself so it was different for me to even get a different experience and physical activity experience…. yes [I enjoyed the session], I mean it even put me out of my comfort zone because like I'm not a dancer or anything like that, but [the group exercise class] has like dance incorporated in it, so I kinda felt like I was like trying new things while [my buddy] was too, so I kinda felt more on [my buddy's] level.*

Similarly, Beth experienced a new type of physical activity and noticed improvements in physical capabilities for both Beth and a participant:

> *Yah, I loved them [yoga classes]. It was something new for me and I enjoyed going and just seeing all the different things that they would teach us, and I like really progressed by the end, like I could see myself and my buddy even, you could see like simple things that we couldn't do at the first session, like downward dog [my buddy] had struggled with the first day, and then was able to do it no problem" ~ Beth*

Bridgette explained how the program allowed participation in group exercise classes outside of the program:

> *The only like slight difference is that through I Move My Mood I got a group exercise pass, so now like I can go to group exercise classes as well, and actually this week I went with my roommate for anti-bullying day so just wear pink, and it was more social, cause normally I go to the gym by myself so going with roommates is different and fun.*

Two volunteers explained how participating in the IMMM program exposed them to many different recreation opportunities at the recreation complex:

> *So like I mentioned, it's through IMMM because of the opportunities I've been rock climbing at the facility, which I probably would have never done on my own, and now I have a group exercise pass which is really awesome too ~ Bridgette*

> *I feel like coming into the program I already knew like lots about the [school gym] but I think it just brought my attention to, just being involved in more, like I participated in rock climbing and intramurals …. so I think being even paired with participants who like 'oh I want to try rock climbing', sure like I'm not going to say no to it, so it's kinda just opening up even myself to new opportunities of being involved in the facility and participating in stuff ~ Danielle*

Beth agreed and also used a group exercise pass and attend different classes at the recreation complex after Beth's participant dropped out:

> *I think the biggest thing was just being exposed to the rec programs that are there, like I had never like done a yoga class or even really considered going to any of those other classes, so for me it just helped to think about like accessing those type of programs and umm after that second participant stopped coming I obviously still had the group ex pass, so there was like friends of mine that all had group ex passes and we all would just go to classes together which was great, umm, and then I think I ended up buying one for the summer, session that year just because I had enjoyed going to yoga so much, so we kept going with a few of my friends ~ Beth*

Some of the volunteers discussed how IMMM opened their eyes to the resources and supports available on campus for both mental health and physical activity services. These volunteers were given the opportunity to participate in new physical activities with their participants and independently, which exposed them to the resources offered at the school's recreation complex.

Valuable Skills. The volunteers also had their eyes opened to the valuable skills and/or work experience they gained through participating in IMMM. For example, when asked the reason for becoming a volunteer, Charlie indicated:

> *I've never worked with people who have struggled with mental health, so I thought it would be like a really good, like learning experience. I think it would just be fun, like I like to exercise myself so try to like, help others improve their health with exercise is a good thing I thought.*

Alex was very honest and stated the reasons for becoming involved in the program.

> *I mean I like to help people so every time I do, you have this kind of good feeling inside of you... but other than that, it's just experience... everything I do is some sort of experience that can help me sometime in the future.*

Bridgette and Emma also wanted to become involved in the IMMM program to gain experience working with individuals who had mental health issues:

> *I think since I want to become [profession], I'm really trying to work with many different populations, and a population that I really haven't worked too much with is the people with like mental illnesses, so I think like exposing myself to that, and even though it's only been one person, I feel like I've really had to collect myself to help them and just understanding different people ~ Bridgette*

> *"I was hoping to learn a little bit more about like what it was like to potentially suffer with mental illness, like I want to be a [profession] when I finish school, so I hoped that it would give me a bit of an insight into like people dealing with different things so I would learn new strategies and how to deal with that" ~ Emma*

Similarly, Alex felt IMMM helped build skills for a future career path:

> *"It's something that will help me when I'm moving forward to pursue my career, I want to go into [career path], and I feel like this is going to help me do so."*

Beth explained how seeing a participant's improvement resulting from the IMMM helped Beth realize the importance of being physically active:

> *I was hoping that I could learn a little bit more about [mental health], and I don't think I necessarily learned a lot more about mental health, but seeing the firsthand experience that my participant had was really eye opening to me and then like now going forward in my career, like what I will be doing in my career now, I think that really solidified the importance of exercise for individuals with like multiple different health concerns, but especially with mental health concerns.*

Danielle explained how the IMMM program helped volunteers gain valuable skills:

> *... beyond this I hope to work [mental health field], so hopefully kinda work my way into there .... just knowing the effects of it and even in all of my classes, mental health is always somewhat of a focus, which is what I like to see in classes just knowing that it's like impacting other people .... so I hope to continue with the mental health aspect.*

Charlie echoed what these other volunteers stated and felt that the IMMM program was a skill building experience:

> *"I think it's a great way to experience working with people that have mental health, especially if you would like to go into the field after you graduate, then it's good experience…"*

Overall, when reflecting on their time in the IMMM program, the program appeared to open the volunteers' eyes to everyone having a story, the resources available on campus and the valuable skills that can be brought forward in future careers. In addition, being exposed to new recreation programming opened the volunteers' eyes to what was offered at the school's recreation complex, they obtained valuable experience that they will bring forward in their careers, and felt that they made a difference in their participants' lives.

5.0 Discussion

The goal of the current study was to explore the lived experiences of IMMM participants and volunteers. In addition to the principal investigator, this study comprised 10 participants: 2 IMMM participants and 8 volunteers from the program. IMMM participants and volunteers reflected on their experiences in the program through one-on-one semi-structured interviews and an anonymous Qualtrics survey respectively. Three themes emerged from the analysis of data, describing the volunteers' experiences in IMMM: (1) lack of role clarity, (2) "did I make a difference?", and (3) eyes opened (see Table 3, p. 37). Throughout the discussion, each theme and respective subthemes will be explored individually and connected to the broader literature. Finally, recommendations for program improvement will be outlined (see Appendix I for a summary of recommendations for IMMM).

5.1 Theme 1: Lack of Role Clarity

A 'lack of role clarity' was exemplified in the subtheme "What can I say?' What do I do?" when some volunteers mentioned feelings of uneasiness interacting with their participants. These volunteers discussed challenges in knowing what to say/do in actual or possible scenarios and talking about their participants' mental illnesses. Volunteers expressed feelings of frustration and advocated for further training or guidelines to help them better understand the level of support they should provide to IMMM participants as a volunteer.

A lack of role clarity has been documented in other research projects related to peer support in mental health interventions (Colson, Francis, & Felton, 2009; Mancini, 2018; Moll, Holmes, Geronimo, & Sherman, 2009; Walker & Bryant, 2013) and mental health/physical activity interventions (Aschbrenner et al., 2015; Stubbs, Williams, Shannon, Gaughran, & Craig, 2016; Vandewalle et al., 2016). For example, Mancini (2018) explored the benefits and

challenges of integrating peer support services into community mental health organizations through the perspectives of peer support workers (peers) and non-peer mental health workers. Peers "identified the need for clarity in roles and responsibilities as the most important factor influencing the effective integration of peer services into mental health treatment teams and organizations" (Mancini, 2018, p. 130). Similar to IMMM, a lack of clarity led to feelings of frustration and "was often the result of unclear policies and procedures, poor communication and a lack of staff training and consultation" (p. 130). Peer support workers in Mancini's (2018) investigation identified a need for more implementation strategies including clear communication, guidelines, and ongoing training for peers and non-peer mental health workers to better integrate peers into mental health support services. Additionally, peers advocated for the establishment of professional boundaries, to balance the disclosure of personal information shared between peers and participants (Mancini, 2018).

Mancini (2018)'s findings may provide some insight into IMMM, and suggest a need for further clarity in the "scope of practice" for IMMM volunteers. This may help volunteers understand their specific roles and boundaries in IMMM participants' treatment plans. Establishing clear guidelines and further training for peer support workers has been recommended in other peer-support interventions (Moll et al., 2009; Walker & Bryant, 2013). Additionally, having trained volunteers is important for participants, as a review of mental health/physical activity interventions by Mason and Holt (2012) identified a lack of trained mental health professionals to be a source of some anxiety among participants. A lack of trained volunteers, or a lack of clarity among volunteer roles may hinder IMMM participants' progression in the program, as it may be a source of anxiety among some of the participants. It is

recommended IMMM clarify the scope of practice for volunteers, as well as differentiate the volunteers' roles from the roles of other support staff (such as counsellors).

In IMMM, some volunteers felt uncomfortable taking on a "personal training" or "leadership" role during exercise sessions, which appeared to be linked to the volunteers' expectations of being an exercise "partner". Similarly, a pilot study by Aschbrenner and colleagues (2015) appeared to echo some of the IMMM volunteers' perspectives. Similar to IMMM volunteers, peer health coaches (or peers who provided peer support for overweight or obese individuals with serious mental illness) discussed having a "strong preference for more mutuality in their relationships with participants", meaning they preferred having an equal relationship with participants (Aschbrenner et al., 2015, p. 282). Specifically, peer health coaches felt uncomfortable taking on the role of an "instructor" or "coach" and being viewed as having more knowledge or experience than participants in the lifestyle intervention, which was also experienced in the present research study. The reason for the peers' discomfort differed from IMMM volunteers, because they believed taking on an "instructor" or "coach" role interfered with the establishment of reciprocal relationships and created a hierarchy. In contrast, volunteers from IMMM felt uncomfortable taking on a "leadership role" because they felt it went against their volunteer training, or they were unqualified to do so. Other research studies have found peer health workers often feel they lack credibility and confidence, and discussed the importance of adequately supporting peer health workers to increase confidence leading interventions (Stubbs et al., 2016; Vandewalle et al., 2016).

Of interest to Aschbrenner and colleagues (2015) was a disconnect between the perspectives of peer health coaches vs. participants in a lifestyle intervention. In contrast to the peer health coaches' desire to provide mutual support, "participants did not express concerns

about the peers' role in the program and instead noted the benefits of the peer modeling healthy behaviors and providing ideas for getting more exercise and improving eating habits" (Aschbrenner et al., 2015, p. 282). Connecting Aschbrenner and colleagues (2015)'s findings to IMMM, there were insufficient IMMM participants to determine their peer support preferences. Some of the IMMM volunteers reported their participants appeared to expect them to provide structured workouts and exercise advice, suggesting a similar disconnect in role expectations between IMMM participants and volunteers may exist in the program. This warrants further investigation. Drawing on the author's personal experience as an IMMM participant, there may have been a disconnect in the perceptions of peer support between the author and her IMMM volunteer. Specifically, the author was anticipating structured workouts during exercise sessions.

These differing perceptions among the volunteers and IMMM participants (including the author) regarding the specific "peer support role" volunteers were expected to fulfill in the program appear to relate to a longstanding debate on what constitutes "peer support" in the literature. Within the literature, there is considerable heterogeneity in the type of peer support intervention and the roles of peer support workers varies considerably (Stubbs et al., 2016). Currently, there is no all-encompassing definition of peer support, which has created issues across the literature in understanding the specific roles of peer support workers (Aschbrenner et al., 2015; Mancini, 2018).

Looking at the broadest definition of peer support, peer support "may be described as support provided by peers, for peers; or any organized support provided by and for people with mental health problems" (Cyr, Mckee, O'Hagan, & Priest, 2016). However, defining peer support is particularly difficult because "one of its defining features is the flexibility to suit people's needs and interests so that 'there are as many different definitions of peer support as

there are peer support programs" (National Network for Mental Health, 2005, p.46). To demonstrate the varying definitions of peer support, refer to a multitude of peer support definitions in Table 5 (Appendix J). Among these definitions in the literature, Davidson and colleagues (2006) provided a framework for understanding peer support roles, through creating a continuum of helping relationships (Davidson et al., 2006). Mutually beneficial relationships exist on one end of the continuum (e.g. friendship), and one-directional relationships exist on the other end (e.g. psychotherapy). Connecting these varying definitions of peer support to IMMM, a lack of continuity in peer support definitions may cause confusion in the level of "support" (both emotionally and instrumentally) volunteers can offer to IMMM participants. It is recommended IMMM outlines an appropriate definition of peer support for the program and establish guidelines that clearly define the type and level of "peer support" delivered from volunteers.

When considering the type and level of support volunteers should provide to IMMM participants, the program could consider the needs of participants in similar interventions. Previous literature regarding the support role of peer volunteers for physical activity interventions have shown peer volunteers to have an important role integrating individuals into physical activity, helping individuals progress through physical activity programs, and enhancing individuals' experiences in programs (Blake, 2012; Crone & Guy, 2008). For example, in a qualitative review of mental health and physical activity interventions, Mason and Holt (2012) found six studies highlighted the importance of mental health/physical activity facilitators because they provided participants with a sense of safety and support, thus helping to increase confidence and esteem (Mason & Holt, 2012). These findings are consistent with the present research study, as the volunteers in the IMMM program perceived themselves supporting their

IMMM participants to attend exercise sessions and feel comfortable accessing the Recreation Complex.

Some volunteers were surprised by the level of support IMMM participants required to attend exercise sessions and feel comfortable during exercise sessions. They perceived IMMM participants having a "lack of knowledge" about being physically active. In the literature, a lack of knowledge is a known barrier for participants in mental health/physical activity interventions. For example, exercise participants in a sports therapy program indicated they had limited knowledge on the use of sports therapy, or participating in physical activity for mental health, despite being involved in sports therapy as a treatment for anxiety and/or depression (Crone & Guy, 2008). Another study found that individuals with anxiety-related disorders "described feelings of uncomfortableness, uncertainty, and anxiety about gym rules and etiquette, the gym culture, and/or the use of gym equipment" which led to increased exercise avoidance (Mason, Faller, LeBouthillier, & Asmundson, 2019, p. 133). Connecting this with the present research study and IMMM volunteer experiences, IMMM participants may not understand the importance or benefits of physical activity for mental health, which may hinder their progression in the program. Educating participants may be beneficial, as participants in the sports therapy intervention indicated it would be useful to understand the theory behind using sports therapy for treatment, as they did not understand how it was beneficial for their mental health (Crone & Guy, 2008). Training IMMM volunteers to educate participants on the role of exercise to improve mental health may lead to program "buy in" and motivation for participants to progress through the program. Alternatively, allowing IMMM participants to attend educational sessions, with trained support staff, where they can learn about the role of exercise to improve mental health may increase program adherence.

Although IMMM volunteers were expecting to support their participants through being an exercise "partner", the current literature suggests service users may require additional guidance and support to integrate individuals with anxiety and/or depression into physical activity. When looking at the recommendations for peer support roles in the literature, Davidson and colleagues (2006) suggest "ideally, peer support should fall in the centre of [the helping relationships] continuum to include both safe self-disclosure and positive role modelling, where peer workers have a valued voice in conventional treatment programs" (Ontario Centre of Excellence for Child and Youth Mental Health, 2016, p. 4). Even though IMMM stressed the importance of establishing boundaries in relation to coaching and counselling, the literature suggests having mutual relationships and allowing volunteers to model physical activity behaviours is beneficial for participants. Within a physical activity context, Aschbrenner and colleagues (2015) suggested peer support interventions for individuals with serious mental illness may benefit from "a collaborative coaching and learning model [because it] may occupy a middle ground where peers help guide participants to develop and obtain healthy lifestyle goals while leading activities that offer direct experiences in healthy eating (e.g., grocery shopping, cooking) and exercise (e.g., walking, group fitness classes)" (p. 282). They recommended peers have a "hybrid role" consisting of both "coaching and peer support [because it] may provide the right combination of reciprocity and targeted support to achieve clinically significant cardiovascular risk reduction in individuals with serious mental illness" (Aschbrenner et al., 2015, p. 282).

It is recommended the program establish the amount and level of support they would like peer volunteers to provide to IMMM participants, because supporting participants as an exercise "partner" may not be an adequate level of support for participants. Based on the perceived need

for additional support from IMMM participants as well as the findings of previous studies, it may be beneficial for the IMMM program to consider broadening the role of the volunteers. Specifically, creating a "hybrid role" consisting of both coaching and peer support may help align the volunteers' role with the needs of program participants. Allowing volunteers the ability to coach their IMMM participants and discuss topics surrounding mental health and/or mental illness may provide IMMM participants with additional the benefits of peer support and mentorship. This may allow for increased adherence and improvements in anxiety and/or depression symptoms, however, further investigation is warranted.

When looking at the relationship between the volunteers and their IMMM participants, these relationships appeared to consist of formal mentoring relationships. According to Inzer and Crawford (2005), formal mentoring relationships are often developed by an organization through programs or processes. These relationships are typically short-term (with the hope it will develop informally over the long-term), and the mentors consist of volunteers who are chosen by the organization. Conversely, informal mentorship relationships arise naturally from relationships that occur in society, the workplace, and in social, professional or family activities. Unlike formal mentorships, either person may initiate the mentoring relationship in informal mentorships (Inzer & Crawford, 2005). Several studies have shown formal mentorship to be less effective than informal mentorship, and these differences may be attributed to the underlying differences in the structure of these relationships (Inzer & Crawford, 2005; Ragins, Cotton, & Miller, 2000). For example, Nemanick (2000) found informal mentoring to be effective because it is voluntarily formed and based on friendship above other aspects such as learning and career aspirations. Connecting this to the current research study, further exploration into the mentoring relationships between the IMMM participants and their volunteers is warranted. Structuring

IMMM to allow for informal mentorship opportunities may help foster relationships within the program not only between IMMM participants and volunteers, but among the IMMM participants themselves. Additionally, informal mentorship opportunities may reduce the stigma associated with mental illness.

5.2 Theme 2: Did I Make a Difference?

The volunteers appeared to have mixed views regarding their influence with IMMM participants, which was reflected when some volunteers exemplified "what success can look like" in the program, while other volunteers did not experience this. The volunteers' mixed perceptions about their IMMM participants' successes in the program appear to relate to the mixed results of the effectiveness of exercise interventions for mental health in the broader literature.

Some volunteers felt their participants were successful in IMMM and noticed changes in their mood, improvements in their physical capabilities, and improvements in confidence demonstrating "what success can look like". When comparing these results to the broader literature, this may reflect some of the positive outcomes of physical activity for mental health. Physical activity is associated with decreased symptoms of depression and anxiety and is associated with a number of physical benefits and positive outcomes for mental health (Blake, 2012; Carek et al., 2011; Cooney et al., 2013; Ravindran et al., 2016; Trivedi, Greer, Grannemann, Chambliss, & Jordan, 2006). Since exercise has been shown to help with symptoms of anxiety and/or depression, IMMM participants may experience the aforementioned improvements due to increasing the amount of physical activity they obtain in IMMM.

The improvements of IMMM participants may also reflect the social support received from the program. Social support has been shown to have a positive impact on both physical and

psychological well-being, with high amounts of social support associated with "decreased symptoms of depression and anxiety in response to life stressors, with increased positive coping, and with better psychological adjustment to chronic health conditions" (Rankin et al., 2018, p. 474). In a study by Kim and colleagues (2015), it was found that "social support was a significant contributor to college students' physical activity" (Kim et al., 2015). Additionally, social support is correlated with physical activity, and is a primary source of self-efficacy (Kim et al., 2015). Having increased self-efficacy is an important determinant of physical activity which suggests that exercising with a volunteer may lead to increased levels of physical activity, increased adherence to programming, and thus improved symptoms among IMMM participants.

Alternatively, some IMMM volunteers felt there was "work to be done" with respect to the program, and felt their participants were unsuccessful in IMMM. Connecting this to the broader literature, several studies have failed to find a significant change in depressive symptoms following exercise (Blake, 2012). These inconsistent results in the literature are thought to be due to the "heterogeneous nature of intervention type, differences in study duration, depression scores at baseline, and assessment methods used" (Stanton & Reaburn, 2014, p. 178). Additionally, exercise interventions in the literature are often unsupervised, and the intensity and frequency of exercise are either not reported or manipulated as part of the study design (Stonerock et al., 2015). Similarly, it may be difficult for IMMM to measure an improvement for all participants because the program offers a heterogeneous intervention type as participants are able to self-select a physical activity offered through the school's recreation complex (e.g. type of activity, level of intensity). Since exercise sessions are unsupervised by IMMM program staff, and attendance is not monitored, it is difficult to understand the frequency and/or intensity of exercise IMMM participants are obtaining. Further, IMMM participants are in the mild-to-

moderate range for depression and/or anxiety, which may make it difficult to infer changes in symptoms.

Another possible explanation for the volunteers' mixed perceptions of their IMMM participants' successes in the program could be due to the mixed perceptions regarding program goals. In the one-on-one interviews, the volunteers appeared to have mixed views regarding the goals of IMMM. These mixed perceptions of program goals included: (1) help participants become comfortable in the recreation complex, (2) use physical activity to improve IMMM participants' mental health, and (3) use IMMM as a stepping stone for IMMM participants to engage in physical activity independently. These varying goal perceptions may have made volunteers consider their IMMM participants' successes in the program differently. Based on the volunteers' differences in goal perceptions, it is recommended that IMMM further clarify program goals and tailor programming to help IMMM participants achieve the desired program outcomes.

If a desired outcome is for IMMM participants to improve their depression and/or anxiety symptoms through exercise, one must consider the appropriate "dose" of exercise needed for participants to experience changes in anxiety and/or depression symptoms. Despite the methodological challenges of establishing a dose-response of exercise for the treatment of depression and anxiety, some guidelines have been outlined. When looking at specific exercise recommendations for depression, both cardiovascular and resistance exercise are recommended, with no evidence pointing to the superiority of either form (Ravindran et al., 2016). When looking at aerobic exercise prescription recommendations, a systematic review of randomized controlled trials (RCTs) reporting exercise to be effective for depression found that at least 30 minutes of moderate-intensity exercise, 3 times weekly for a minimum of 8 weeks was

considered effective (Perraton, Kumar, & Machotka, 2010; Ravindran et al., 2016). Additionally, the UK National Institute for Health and Clinical Excellence (NICE) recommends "three sessions per week of moderate duration (45 minutes to 1 hour) over 10 to 14 weeks (average 12 weeks)" for individuals with mild-to-moderate depression. (NICE, 2009). When looking at the exercise recommendations for anxiety, no specific dose-response guideline has been established, however some studies have suggested that a "dose-response effect may exist, though findings have been equivocal" (Stonerock, Hoffman, Smith, & Blumenthal, 2015, p. 552).

Considering the rough guidelines for the dose-response of physical activity and depression, the perspectives of volunteers suggest that IMMM participants may not be obtaining enough physical activity to experience improvements in depression and/or anxiety. In the present research study, the volunteers reflected on engaging in physical activity with their participants an average of "once to twice per week" for durations of approximately 1 hour. Additionally, cancellations and scheduling conflicts reduced the overall amount of physical activity IMMM participants obtained. Contrasting the volunteers' perceptions of the amount of physical activity obtained in IMMM with the exercise recommendations in the literature, it appears that IMMM participants may not be engaging in the recommended durations of exercise. If IMMM program goals include managing depression and/or anxiety through exercise, it is recommended IMMM explores increasing the frequency and/or duration of exercise, and reducing participant drop-out/cancellations.

Looking to the literature, flexibility in programming may be advantageous for exercise adherence because individuals with mental illness tend to drop in and out of exercise programs (Crone, 2007). According to an investigation into a sports therapy intervention for individuals with mental health issues by Crone and Guy (2008), motivation is a known barrier for people

with mental illness and program participants in sports therapy acknowledged it took great effort to get to sports therapy. IMMM participants may experience similar barriers to being physically active and attending scheduled exercise sessions. Among sports therapy participants, motivation, anxiety and apprehension, and cost were the main factors that affected participation in the sports therapy intervention. To help IMMM participants obtain enough physical activity in the program, and prevent program drop-out, it is recommended to account for missed and/or cancelled exercise sessions and allow flexibility for participants to make up for missed sessions. Additionally, it is recommended IMMM implement additional supports to address motivation and increase the flexibility of programming, such as implementing drop-in sessions and/or drop-in group exercise sessions for IMMM participants. This may reduce drop-out by allowing IMMM participants the flexibility to attend multiple drop-in sessions each week, and it may give IMMM participants the ability to build relationships with other individuals in the program. This additional social support may help IMMM participants progress through the program through expanding IMMM participants' social networks. This may suggest increasing the amount of social support for IMMM participants, may lead to increased levels of physical activity among IMMM participants.

5.3 Theme 3: Eyes Opened

This study brought forward the experiences of the volunteers in a mental health/physical activity intervention. Although there were mixed views on the success of IMMM participants in the program, every volunteer had their eyes opened in some way. Looking to the broader literature, there are known benefits of volunteering, which include "benefits for wellness, social networks, and opportunities [for professional development]" (Walker & Bryant, 2013, p. 29). Additionally, "volunteering has been shown to be beneficial for mental and physical health, life satisfaction, social well-being and depression" (Yeung, Zhang, & Kim, 2017, p. 6). These benefits appeared to be present among IMMM volunteers, as they recounted having their eyes opened to everyone's stories, the services and supports on campus, and skills gained after participating in IMMM.

Every volunteer in IMMM expressed positive experiences with the program. After participating in IMMM, volunteers described how the program allowed them to develop empathy and understanding of IMMM participants' stories. Further, some volunteers felt they made a difference in their IMMM participants' lives through supporting their IMMM participants during their treatment process. This aligns with previous research describing the reasons for volunteering, which included feelings of charitable responsibility and helping individuals with whom volunteers collectively identify (Thoits & Hewitt, 2001). IMMM volunteers felt their contributions contributed to a greater cause and helped their IMMM participants take a step in a positive direction for the management of their mental health. Additionally, previous research has shown individuals volunteer to "develop the self, to enhance self-esteem […] to express personal values and community commitment" (Thoits & Hewitt, 2001, p. 117). Volunteers in IMMM described how the program allowed them to learn of the resources available for mental illness

both on and off campus, allowing them to access these resources or refer others to the services and supports. This allowed volunteers to contribute to their own wellbeing and the wellbeing of the community. Additionally, IMMM volunteers were able to express personal values and community commitment though helping IMMM participants "take a step in the right direction" towards managing their mental health.

When looking at the benefits of volunteering in IMMM, many volunteers described how the program allowed them to develop valuable skills to benefit their future careers, which is echoed in Thoits and Hewitt, (2001). In fact, a major motivation for volunteering among young people is having the opportunity to build work-related experience and gain skills and qualifications to help in education and future careers (Eley, 2003; Smith et al., 2010). Many of the volunteers in IMMM expressed a desire to develop skills and gain experience working with individuals who have mental health concerns to build experience and help their future careers. Interestingly, when comparing the instrumental and value-driven motives for volunteering, a study by Smith and colleagues (2010) found instrumental or career motivations were not statistically different from altruistic/value-driven motives (i.e., to help others) and social/ego-defensive factors (i.e., to make new friends) among youth. Similarly, IMMM volunteers participated in IMMM to help others in addition to gaining relevant work experience and meeting new people.

This study highlights the benefits of peer support in physical activity interventions for not only participants, but the volunteers who helped facilitate these programs. Every volunteer expressed positive experiences with IMMM because volunteers felt they made a difference in their IMMM participants' lives through supporting their participants during their treatment process. Even though not every volunteer perceived their IMMM participants as being

"successful" in the program, some volunteers described their experiences as "rewarding". Adding to the literature, this study shines a light on the benefits of a mental health/physical activity intervention for program facilitators.

5.4 Limitations & Future Research Directions

The present research study aimed to explore the lived experiences of IMMM participants and volunteers. Some of the limitations of this research study included a lack of data from IMMM participants due to recruitment difficulties with this population. This may be due to the time commitment needed to participate in the interview portion of the research study (45-60 minutes), or the fact that these individuals are uncomfortable with identifying themselves as being in the IMMM program. Due to recruitment difficulties, another limitation of the present research study is data saturation (i.e., "when gathering fresh data no longer sparks new insights or reveals new properties") was not reached for the IMMM participants (Creswell, 2013, p. 239). It is recommended that future research projects hoping to conduct qualitative research with this population consider anonymous methods of research participation in addition to formal one-on-one interviews.

Another limitation to the present research study is the total population of past and present volunteers was unknown. Therefore, the proportion of volunteers who participated in the present research study is unknown relative to the total number of past and current volunteers in IMMM. Due to these limitations and use of purposeful sampling, when looking at the transferability of the present research study, these results are not generalizable to past, current, or future IMMM volunteers who did not participate in the research study. Additionally, these results are not transferable to other mental health/physical activity interventions.

Even though IMMM volunteers and participants were recruited using purposeful sampling, individuals self-selected to participate in the present research study, which may have led to a possible volunteer bias. Volunteer bias is "the systematic error resulting when participants who volunteer respond differently from how people in the general population would respond" (Rosnow & Rosenthal, 1997, p. 91). The IMMM volunteers and participants who selected to participate in the research study may have had different experiences than those who did not participate in the research study.

Reviewing broader literature yields recommendations to clarify roles or establish guidelines for peer support for individuals with mental health issues, specifically in a physical activity context. Establishing guidelines for the roles of peer support workers would help other interventions understand the scope of practice for peer volunteers and apply to programming. Establishing training protocols would help peer volunteers clarify their role in programming and allow them to better understand their boundaries. Connecting this to IMMM, it is recommended that IMMM looks into establishing clear guidelines for volunteer training and identifying role boundaries for volunteers in the program. Additionally, it is recommended for IMMM to clearly define program goals to allow IMMM participants and volunteers to measure progression toward program goals. After the end of IMMM, there was no follow-up with IMMM participants and/or volunteers to understand their experiences after completing the program, making the long-term effects of the program unknown. It is recommended for IMMM and future research projects to follow up with participants after completion of the program to understand whether IMMM participants continue to engage in physical activity and/or experience improvements in mental health symptoms (see Table 4, Appendix I).

Looking to the broader literature, it is recommended future research investigates the relationship between mental health and physical activity to establish an appropriate "dose" of physical activity for individuals to experience improvements in mental health symptoms. Establishing physical activity recommendations for individuals with mental illness would ensure intervention participants are obtaining adequate physical activity to experience improvements in anxiety and/or depression. Further, understanding the appropriate "dose" of physical activity may help identify a clear goal for the amount and duration of physical activity for participants, which in turn may lead to increased program adherence.

6.0 Conclusion

This study adds to the previous literature looking at the experiences of volunteers and participants in a peer-based mental health physical activity intervention. This study provided a narrative to the researcher's experience in IMMM and shone a light on the experiences of volunteers who provide peer support in a mental health/physical activity intervention. It brought forward some of the challenges and benefits of peer-based mental health/physical activity interventions for university students with anxiety and/or depression. Some challenges for volunteers included a "lack of role clarity" and some volunteers recommended there was "work to be done" on the program. Other volunteers exemplified success in the program when they witnessed changes in participants and contributed to a greater cause. The volunteers who participated in the present research study indicated glimpses of positive experiences in IMMM, however, they also faced some challenges (e.g., lack of role clarity and participant cancellations) and had their eyes opened to the ups and downs individuals with depression and/or anxiety experience.

7.0 References

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8.0 Appendices

APPENDIX A

The Researcher's Journey with I Move My Mood

In order to be fully transparent in the research process, it is important the researcher participates in reflexivity, or "the process that enables researchers to critically examine the nature of their work and how their assumptions, underlying values, and preconceptions affect the research produced" (Alley, Jackson, & Shakya, 2015, p. 427). As part of the reflexive practice, I detailed my experiences with the IMMM program, and my prior preconceptions and beliefs about the program prior to the research study. I also detailed my personal experiences with mental health. With the use of entries from my personal diary, a personal story I wrote about my journey, and quotes from a one-on-one interview I participated in with a PhD student, I detail below my personal experiences as a participant in the IMMM program.

Depression and Anxiety. Everything in my life changed when I fell into a very deep depression in my third year of university, as evidenced during my interview: "third year was my worst year in terms of mental health […] I went from probably having seasonal affective disorder and feeling already a low mood, to [….] the lowest I've ever been, and the worst part was the second that the spring hit it never got better, and normally it would". Up until that point, I had struggled for many years with chronic migraines, seasonal fluctuations in my mood, and symptoms of anxiety. I knew this depressive episode was more than a seasonal fluctuation in my mood after my symptoms did not subside when the spring arrived, which was different than anything I had previously experienced with my mental health. I could not get myself to participate in activities I once loved, such as softball or running. For example, during softball games, my heart would race, breathing would become difficult, and I would be shaking so badly

that I could not catch the ball. I struck out more times than I could count, which made games unenjoyable. In fact, I was so low that I ended up avoiding practices altogether and eventually quitting, because I could not concentrate during games. On top of having issues with my once-loved activities, I developed a fear of driving. Every time I was behind the wheel of my car, my heart would race, and I would feel severe brain fog. Since I feared driving places, I avoided driving altogether. In hindsight, I now recognize these signs and symptoms I was experiencing were related to Generalized Anxiety Disorder. The combination of feeling anxious and depressed left me housebound and frustrated with myself as I began to lose friendships and I could no longer get myself out of the front door.

> *Like I couldn't, I couldn't do anything that I enjoyed... and it was, and it was kind of in two aspects like one aspect being a loss of interest, when you're depressed you don't want to exercise, you have no interest in exercising so you just… don't. But then the anxiety is, even if you want to, you can't even get yourself there so what's the point? So that happened with, not only physical activity but many aspects [of my life] like… even, anything really, anything to go to, anything to connect with people. It's kind of the same thing you're just either don't want to or you're too anxious, so you convince yourself that you don't want to.*

By the summer of third year, I was really suffering. Every night after work, I would come home, lay in bed, and watch TV, as I had no energy to do *anything*. I had no energy to go outside, and my regular activities, such as doing school work and working part time, became a daunting task. I worried that this was going to be "it" for me, and I had nothing to look forward to for the rest of my life. In my diary, I wrote, "thinking of the future makes me feel like I have no purpose in life, I'm just going to die anyways". It is difficult to convey what I was feeling, other than I felt surrounded by clouds. I thought that I would never be happy again, and that my life had no purpose. One excerpt from my diary epitomizes how I was feeling at that time in my life:

Depression

I can't breathe. I can't even begin to think about all of the stuff I have planned this month.

I try, but the thoughts are all consuming – consuming my mind and clouding my vision. All I see are clouds.

I can't move, I'm exhausted. I sleep until noon. But the second I try to tell someone, it's gone and I don't understand why I was sad.

Getting Help. That summer, I finally decided to reach out for help by accessing my school's counselling services. I obtained a new counsellor, as I had tried in the past, with little success. I learned that I was dealing with moderate to severe depression and anxiety, which was a major reason for my poor performance, lack of energy and constant feelings of tension about everything. I knew that I was depressed, but I did not realize that I was also experiencing anxiety. My counsellor recommended that I talk with a physician and get on medication for my anxiety and depression, so I booked an appointment with a doctor.

The doctor confirmed my diagnosis and prescribed medication for depression and anxiety. With the new medication dosage came many side effects, including nausea and extreme fatigue. In fact, I became so lethargic, I started napping for hours after arriving home each night – and I have never been one to take naps (ever!). The benefit of being so tired was that I spent more time sleeping than feeling anxious; however, I felt like the medication was turning me into a completely different person. I slept away the rest of my summer, never having the chance to go to the beach or participate in fun activities with my friends. I felt like the system was failing me. I started to get really angry with the thought of trying all of these different medications before one worked. At this point, it had already been a month and a half since I had initially reached out for help, and here I was, feeling even worse than when I had started. Further, I had been struggling since the winter with severe depression and I saw no light at the end of the tunnel. Up

to this point, the only thing that had been helping me was attending bi-weekly counselling sessions, so I decided to continue with counselling and stop taking the medication.

It was through regular counselling sessions that I learned my anxiety was a large factor that led me in a downward spiral to depression. “So, by the time I started actually learning… basically the reasons why I was depressed... I wasn't leaving the house, I wasn't connecting with friends, I wasn't getting active and stuff… a lot of it came from anxiety”. For example, being too anxious to drive forced me to stay inside and not leave the house. By not leaving the house, I became socially isolated, extremely bored and almost “crazy” as I had nothing to do with my time. In order to break this cycle, it became evident that I had to get myself out of the house in some way – even though I knew it would trigger my anxiety. As I continued with counselling, I began setting small goals in each session, which motivated me to take small steps to improve my mental health. My first goal was to begin walking each evening, to get myself outside. I began walking with my mom each night, which allowed the two of us to bond and it gave me something to look forward to each day. As I became consistent with my walking goal, I began to set more goals. Some of these goals included reaching out to friends, going on dates with my boyfriend and finding an activity to join. As I began accomplishing these goals, I started to feel happier and more confident. Even though my anxiety still controlled a large part of my life, I began finding ways to work around it and still participate in activities and social settings. I continued with counselling into my 4th year of university, and it served as a great relief for stress associated with school.

> *Depression, I would say it was mostly like for some fluke it went away [....] but I would say maybe it was the fact that I was taking steps to actually manage my mental health, especially the anxiety piece, that it kind of made me feel more motivated, like [...] I did not want to get back to that place where I was... and like, that was my big motivation.*

By my second semester of fourth year, I was no longer depressed, but I was still struggling with getting myself out of my comfort zone, and doing the different activities that I used to enjoy (such as playing baseball or going to the gym). Anxiety was my new reality, as I found myself "fighting" it each and every day. For example, I had set a goal with my counsellor to exercise at the gym because I had always been an active person, but I felt too nervous to ever set foot in the school's gym. Each week, I tried to get myself to go to the gym, but I did not go. There was one day where I even remember packing all of my swimming gear to go to a lane swim at school, but I did not end up doing it. Other times I packed my gym clothes, but I just could not get myself through the doors. It was so much easier to do homework, or just go home. Even though I had made a lot of progress with improving my mental health, my anxiety was still so hard to overcome.

> *"I just remember walking in [the gym] and feeling like so awkward and like, people, I always felt like people were looking at me even though the probably weren't. But it was probably that, you know, I was doing the exercise, "am I doing it wrong?". Are people looking and saying, "oh my gosh that girl has terrible form" … so, naturally I wouldn't do any exercises. I would go to the gym, I would go on a cardio machine for 20 minutes, half an hour, 45 minutes depending on how I felt, and then I would go home…"*

Referral and Intake into the IMMM. My counsellor suggested I join IMMM almost 1 year into receiving semi-regular counselling. The conversation about the program came up after I expressed frustration with not being able to get myself to the gym due to anxiety. In addition to feeling too anxious to drive myself there, I also did not feel comfortable enough to lift weights, and I feared people would look at me. In my 4 years at my school, I had never even set foot in the school's gym because I was too intimated by that atmosphere – and I was a Kinesiology student! "I remember setting goals of like being physically active, so I wanted to go for a lane swim and I would come to school with my bag packed and then I wouldn't go... like, I would just

not, I couldn't get myself in the door. And so when I was expressing this to the counselor she then suggested, ‘okay what about I Move My Mood?’”. I accepted my counsellor’s recommendation to join the program because I thought it might be a good opportunity for me to learn how to do exercises with proper form and become oriented with the school’s gym through exercising with a buddy. I also wanted to feel more comfortable in the gym setting, so that I could eventually exercise there on my own. I was informed that I was admitted to the program a little later than normal, as I was already one month into my second semester. This left me with approximately 8 weeks left to complete the typical 10-week program.

Once I agreed to participate and I signed the consent form detailing the risks of physical activity and collection of anonymous program data, I filled out two questionnaires – one for anxiety and one for depression. In approximately 3 weeks I was contacted by the program coordinator. She scheduled an interview so she could ask me questions about the free service I wanted to use, my goals for the program, and the type of buddy I would want for the program. I selected personal training for my “free” service because I wanted to become more comfortable in a gym setting, so one day I might be comfortable enough to go on my own. My personal goals were to become more comfortable in the gym and learn how to perform exercises such as squats and deadlifts. For a buddy, I wanted a non-kinesiology female that was preferably my age or older than me, because I did not want to disclose my mental health issues to people in my program. I was worried about being paired with a student from my program, as I did not want others to know that I was participating in IMMM.

The Role of the Buddy. Another week went by and I was finally paired with my buddy. I was e-mailed to come in for a second interview to meet my buddy and come up with a schedule for us to exercise. During the interview I was informed the personal trainer could not personally

train me for an unknown reason, which left me feeling disappointed. “In terms of the exercises and I was a little disappointed as well that I didn't get the personal training sessions because, like I was really looking forward to that cause… yeah, I always wanted to do personal training”. My buddy said she felt confident enough to train me in the gym because of her experience with exercise. We decided to exercise twice per week together and I decided to give my buddy a chance.

We began the program the following week, and continued to exercise for approximately 5 weeks together. Each time I met my buddy in the lobby of the gym, which I found to be quite awkward and uncomfortable, because she would go up to the front desk and tell them she was a volunteer for IMMM and we would enter the gym facility together. Honestly speaking, I cringed every time this happened, because I knew many members who worked at the front desk of the gym, and I did not want them to know that I was a participant in the program. It was anxiety triggering, as it caused me to form all of these “assumptions” in my mind, and I was worried they knew I was depressed and anxious, or I did not know how to exercise, and I was maybe struggling with “something”.

Looking back, I found our exercise sessions to be good, but not quite challenging enough. Overall, my exertion level was low, as the exercise sessions seemed to be more of an orientation to the athletics facility than an actual workout.

> *“Umm, I would say I didn't mind that it was a lower exertion just because I wanted to learn, like I was more there to learn how to use the equipment, umm... however I felt like a lot of the moves that I was learning were low exertion-type moves, so I kind of was hoping for something a little more intense that I could, you know, I guess challenge myself and build my fitness”*

During sessions, we went through many exercises that my buddy knew; however, I did not really learn how to confidently do all of the exercises I wanted (such as squats and using the

larger equipment) due to limited time in the program. Some of the exercises we performed made me uncomfortable, and I “felt weird” doing them. For example, there was one exercise where I carried a kettlebell over my head and walked from one end of the gym to the other. Although it was apparently a great exercise, I felt very weird and anxious doing it. I still tried to have an open mind about these exercises, and really had to hold in my anxiety to do them.

The hardest part about working out with my buddy was the crowded gym environment. In fact it was often so busy the equipment we wanted to use was being used. This caused us to not use the entire gym facility, only two sections of the gym, which still caused me to feel uneasy accessing this facility on my own. We often had to make do with what we had. In my personal experience, I found the exercise sessions to be more of an “orientation” to the gym facility rather than an actual exercise session. As I continued to exercise with my buddy, I did find myself feeling motivated and as I was taking steps towards my mental health; however, I did feel like I wasted the opportunity by starting IMMM mid-way through a semester because we were unable to progress to more challenging exercises. Further, I was not even able to obtain personal training from one of the personal trainers which I found to be very disappointing.

When looking at the length of time exercising in the IMMM program, my buddy and I met twice per week for approximately 3 weeks, for two months. Overall, we scheduled 9 sessions together, and we successfully met at the gym and exercised 4 times. “Yes, we did work out twice a week for 5 weeks, but there was a lot of cancelled sessions as well and some of them were me canceling, like I had a midterm the one day, and I was sick another day but then there were some that she canceled because she was busy or working or some other commitment. So I found it hard to connect and just make sure that we stayed consistent with that...”. As much as there were a lot of cancelled sessions from both parties, I was proud that I continued exercising. I

felt that having a buddy made me more accountable to exercise, as she was counting on me to show up. If I had attempted to go by myself, I probably would not have gone to the gym at all.

The contact between my buddy and I ended sooner than I was anticipating. “At the end I was just like a little bit disappointed when I texted her to say I was going on vacation she just didn't reply, or say anything so I was kind of like okay like guess we're done training and then that was kind of it, so I felt like it just ended”. I was disappointed she never responded to my message. Since we did not select an end-date for our exercise sessions, I felt a bit confused as to whether I had actually finished the program or not. “I was sitting there going, should I… is it over? Like should I text her... like I didn't actually know… And, so I just kind of assumed it was over when I wasn't sure…”. After learning more about the program, I realized that contact with my volunteer may have ended to maintain my confidentiality.

End of the IMMM Program. I met with the program coordinator to talk about whether I achieved my goals and to conclude the program. This meeting was before I had actually officially finished the program, as the semester was ending and they needed to interview me before exams. I met with my counsellor one final time to take a post-test measure of my anxiety/depression (I cannot remember if it was before or after completing all of my physical activity sessions). My symptoms did decrease, but I was not sure if it was due to the program, or the fact that the semester was coming to an end. When reflecting on the end of that semester, things were looking better for my mental health because I had developed more effective studying habits and strategies for exams. Further, since I was in 4th year, I had a lot of major projects and assignments rather than tests, and tended to do better with assignment-based evaluation.

Life After IMMM. After finishing the program, I definitely felt I was no longer depressed; however, my anxiety was still difficult to control. “In a day-to-day sense, I probably

still had the same amount of anxiety, however, I was taking steps to be... to manage it so, I did start to feel better and like in terms of the depression, it was more like, again like I said before, you're doing something… so like if you're doing something, it's not like you're going to suddenly dip down". When looking at my physical activity, I was still nervous to go to the gym, therefore, I resumed my typical physical activity behaviours I was comfortable with, such as running. I felt like I had reverted to my old habits in the summer, as I often would run or participate in outdoor activities.

> *So I wanted to maintain physical activity and I was feeling more confident in myself after doing that program, however, I felt kind of like I was by myself and I didn't know what to do... So, I ended up naturally just going back into what I do every summer, which is I just start running, start going on more walks, hikes, stuff like that… umm, and I did, I would say in fourth year, this summer, I was very active... but I still wasn't confident enough to go to the gym. So, yes I was, I would say equally as active as I would have been in previous years, I still, I wanted to be more active if that make sense. Like I wanted to, rather than just walking every day, I wanted to go to the gym and feel confident being there.*

Approximately four months later, at the start of the fall, I connected with two friends and I began exercising with each of them, separately. This helped me manage my anxiety and depression as it gave me an athletic outlet, and a new buddy to exercise. Although I still avoided the school's gym, I could bring guests with me to my local gym which had a Women's Only section. This worked out well, as I would often carpool to the gym with each friend, once to twice per week and felt comfortable using the equipment in the Women's Only section of the gym. Around the same time, I also decided to reach out and join a synchronized swimming team at school that fall, which forced me to get out of the house and exercise in a team environment. Finding myself a new buddy, and a team to exercise with helped me to step out of my comfort zone, and begin exercising regularly.

> *So the second I found kind of a new buddy to kind of take over that person then it was like all the pieces click together and then it worked and so then with this friend she was she was way more confident than I was trying new exercises… you know, doing weird ones with the cable and stuff and I would never even consider trying them cause I would be afraid of not doing them right, but then you know she would just do it and I and then I would realize like I'm not sitting there thinking that she's doing things wrong I'm sure people around aren't even looking at her like nobody cares so then after that she would show me a few exercises and I would try them, and then it kind of helped me feel more confident.*

I continued exercising with friends and swimming for the rest of that school year, which I found to be rewarding physically (I began to build muscle), socially (I was able to talk with friends at the gym), and mentally (as it temporarily distracted me from stress). Even though I still experienced high levels of stress due to starting graduate school, I felt I was covering my bases in managing my mental health. I was continuing regular counselling, implementing coping strategies for anxiety (such as time management and cognitive behavioural therapy principles), and exercising a minimum of twice per week. By the spring of the next year, during my second semester of graduate studies, I found myself loving exercising, and almost feeling anxious or "on edge" if I did not get myself to the gym each week.

Even though I was exercising regularly, I still felt quite anxious about having improper form, and so I avoided many exercises. For my birthday I asked my boyfriend for a package of two personal training sessions at my school's gym, so that I could learn proper techniques for the exercises I wanted to learn, get a more "in depth" tutorial of how to use the equipment (such as squats and deadlifts), and feel comfortable accessing the facility on my own. The personal trainer was surprised how knowledgeable I was with the equipment, and taught me more advanced exercises using the squat racks, TRX and bench press machine. After finishing with these sessions, I felt much more confident exercising on my own. I also felt that I had finally experienced the personal training I had "missed out" on during the IMMM program.

Reflecting on IMMM. When reflecting on my experience in the program, I feel like I was not given the full experience of the IMMM program and as such did not obtain all the benefits that the program may have to offer. This is because I was unable to obtain personal training sessions, and only participated in the program for 3 weeks, and a total of 4 sessions. During cancelled sessions, I was not confident enough to attend the gym without my buddy, so I often did not exercise at all. In hindsight, I did not find the exercise sessions challenging enough, but this may have been due to the limited time in the program.

When looking at the positive aspects of participating in IMMM, I liked that this program helped bring me out of my comfort zone, and allowed me to challenge my confidence. I feel that the program helped orient me with the school's gym, understand the importance of having a buddy, and take physical steps to manage my mental health.

> *Being in the I Move my Mood program kind of opened my eyes to the umm, importance of getting yourself, like, in the group setting, or just.. you know, if you can't get yourself out of the door, maybe somebody else can. So, I guess yeah that experience would have led me to seek.. Umm, you know, a team or Synchro or some sort of activities then I would at least be doing that once a week. So yeah.. for sure I'd say maybe look for more physical activity-type opportunities*

Learning how to access the school's gym helped me to feel more comfortable entering the actual facility and knowing where to go to complete my desired exercises. Further, accessing the gym with a buddy allowed me to feel more comfortable exploring the facility and experimenting with different exercises and equipment. Understanding the importance of having a buddy helped me to reach out to other friends to replace my buddy after the program ended. Once I obtained my own personal training sessions, I felt I was more confident in using the gym facility, and had a starting point to build my own exercise program after completing IMMM. Overall, I was happy the program was a step forward with my treatment and I felt like I was

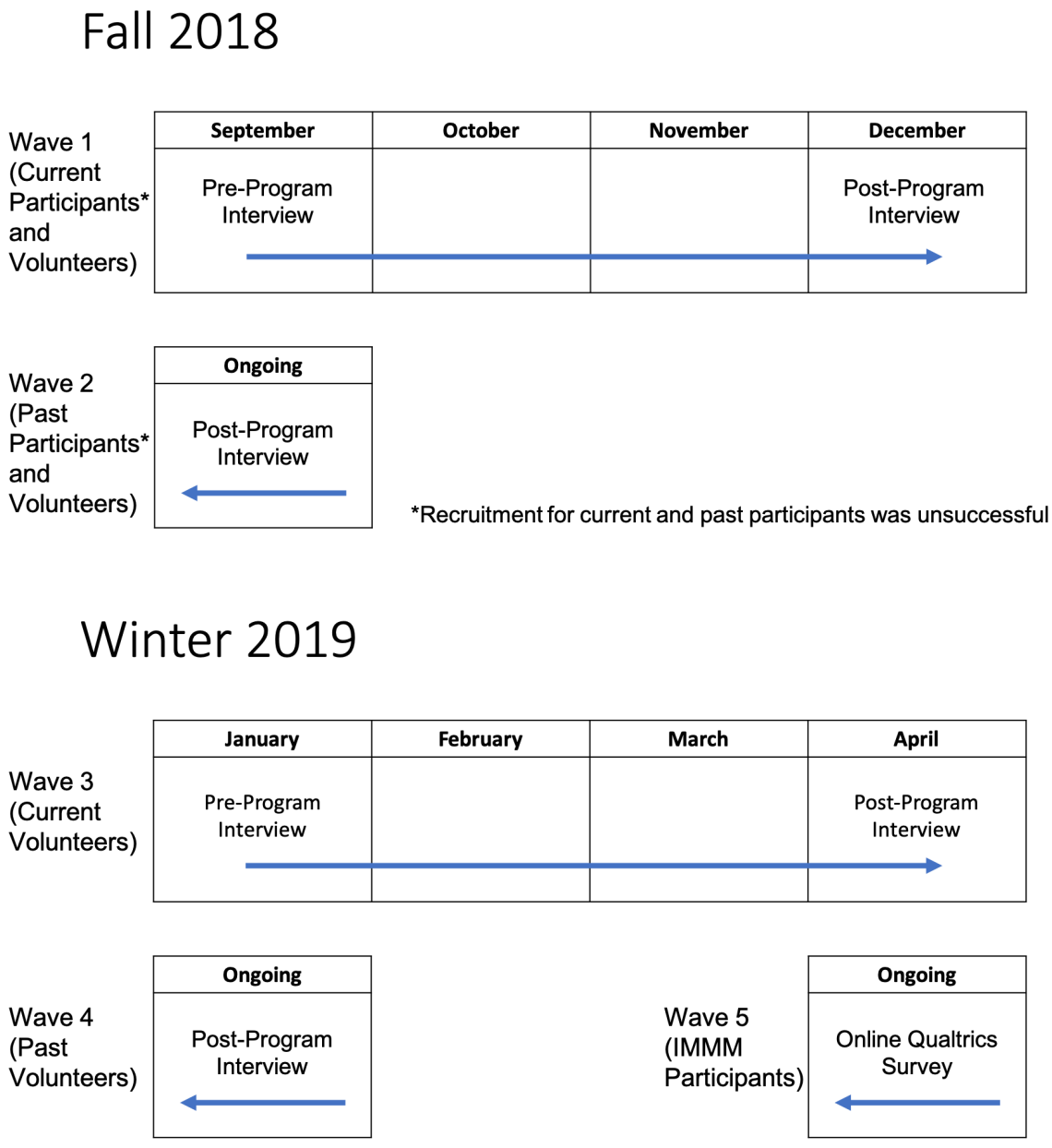
starting to “take control” of my life again. Learning how to incorporate exercise into my daily life helped me add another management strategy to my existing coping mechanisms.

> *I think I remember this experience is being kind of a turning point in my life... more in terms of actually doing something, taking actual physical steps into the gym to have some effect on myself and my mental health. So, I would say that it… yah, it was very much a turning point in my life to rediscovering exercise, rediscovering my love for it, umm and teaching me like how... how to do it, how to get there, and like whether it be how to actually do the exercise, it was more for me about, how to get yourself there, how to be in that environment, and almost like retrain my anxiety, like my brain to yah, just do it… i dunno [laughs].*

APPENDIX B

Layout of Qualitative Design

Figure 1. Research plan from September 2018 – April 2019.



APPENDIX C

Face Sheets

Identification Number (assigned by researcher): _____

Face Sheet for Past and Current Participants of Program

Please complete the following to the best of your ability.

1) Date of Birth: (MM/Year) _____
2) Age: _____
3) Gender: _____
4) Program of Study: _____
5) Year of study: _____
6) Faculty: _____
7) Level of study (check one): □ Undergraduate or □ Graduate or □ Doctoral or □ Other

   If selected other, please specify: _____
8) Student Status (check one): □ FT or □ PT
9) Are you registered with the Accessible Learning Centre (ALC) (check one)? □ Yes or □ No
10) Do you have any health conditions? If so, please list.

Condition	When were you diagnosed with this condition?	How long have you dealt with this condition?	What, if any, pharmacological treatments have you been prescribed? (e.g. antidepressant medication)	What, if any, other lifestyle treatments have you tried?

Identification Number (assigned by researcher): _____

Face Sheet for Volunteer of Program

Please complete the following to the best of your ability.

1) Date of Birth: (MM/Year) _____
2) Age: _____
3) Gender: _____
4) Program of Study: _____
5) Year of study: _____
6) Faculty: _____
7) Level of study (check one): □ Undergraduate or □ Graduate or □ Doctoral or □ Other

   If selected other, please specify: _____
8) Student Status (check one): □ FT or □ PT
9) Are you registered with the Accessible Learning Centre (ALC) (check one)? □ Yes or □ No
10) Have you volunteered with the program before (check one)? □ Yes or □ No
11) If yes, for how long? _____
12) Do you have any health conditions? If so, please list.

Condition	When were you diagnosed with this condition?	How long have you dealt with this condition?	What, if any, pharmacological treatments have you been prescribed? (e.g. antidepressant medication)	What, if any, other lifestyle treatments have you tried?

APPENDIX D

Primary Researcher Interview Questions

Interview 1: Primary Researcher

Thank you for meeting with me today. To start the interview, I would like to discuss your experience in your academic program this semester.

1) Academic Program & Workload Stress
    a) Describe to me your workload throughout the semester.
        - Was the workload heavy/light?
        - Did you find this term difficult/easy?
        - How, if at all, were you able to manage your workload this semester?
    b) Describe to me the activities you are involved in both on campus and off campus.
        - Did you volunteer?
        - Did you work?
        - Did you participate in any extra-curricular activities?
    c) What strategies, if any, have helped you deal with stress?

Now that we have discussed your experience in your academic program this semester, we will now talk about your experience with physical activity after participating in IMMM.

2) Role of Physical Activity
    a) Describe to me how, if at all, did the role of physical activity change in your life after participating in IMMM?
        - What activities do you participate in?
        - How many times per week do you engage in physical activity?
        - Where do you engage in physical activity?
            - Do you use services at Laurier?
            - Do you use any off-campus activities or facilities?
        - How, if at all, has your physical activity changed after participating in IMMM?
    b) Describe to me your confidence accessing physical activity facilities (such as the Athletics complex or other facilities).
        - How, if at all, has this changed from before the program?
    c) What, if any, barriers are there to your participation in physical activity?
    d) Moving forward, do you think will you continue to participate in physical activity?
        - If so, how often?

Now we will discuss the types of exercise you did with your buddy, and the role your buddy played in your experience, and your experience in the program.

3) Types of Physical Activity

a) Describe to me a typical exercise session with your buddy
    - What do you do?
b) How often did you exercise with your buddy?
c) How intense are the exercise sessions?
    - On a scale of 1 to 10, how would you rate your exertion during exercise sessions?
d) Did you enjoy your exercise sessions?

4) Role of Volunteer
    a) What role, if any, has your buddy played in your experience?
    b) In what ways did your buddy meet your expectations?
    c) In what ways did your buddy fail to meet your expectations?
    d) On a scale of 1 to 10, rate your satisfaction of your buddy.

Next, I would like to talk about your past and current experiences with **anxiety and/or depression**. Is that okay if we talk about that for a few minutes?

5) Symptoms of Depression and Anxiety
    a) Tell me about your experience with _____ (condition) this term.
    b) How, if at all, did your depression/anxiety symptoms change over the course of the semester?
        - How, if at all, did your condition manifest in a typical day/week/month?
    c) How, if at all, did you manage your symptoms of anxiety and depression throughout the semester?
        - Did you access additional services?
    d) If at all, describe how the IMMM program helped you manage your depression/anxiety symptoms?

Thank you for discussing your experience with _____ (condition). Now, we will talk about your experience accessing services on and off-campus services.

6) Program Discovery
    a) How, if at all, has participating in IMMM helped you access the Athletics Complex?
        - Will you participate in more classes? Attend the gym more?
    b) How, if at all, has participating in IMMM helped you access other services?
        - Other gym/activity, counselling services, other treatment methods

7) Goals and Expectations
    a) What were you hoping to achieve from participating in the I Move My Mood Program?
        - What goals or expectations did you have for the program?
    b) Did the program allow you to achieve what you expected?
    c) After participating in the IMMM program, did you discover other reasons for participating that you did not initially anticipate?
    d) After completing the program, what are your next steps?

- Do you plan to continue exercising?

e) Would you consider becoming a volunteer for the IMMM program?

Next, we will discuss your experience in the program and the value the program had for you.

8) Program Experience
   a) How would you describe this program to someone who has not experienced it?

9) Program Value and Positive Aspects
   a) In what ways has the IMMM program met your expectations and/or needs?
      - What, if any, benefits have you experienced from the program?
   b) Have you told anyone about the program?
      - Would you recommend it to a friend?

Next, we will discuss some drawbacks to the IMMM program.

10) Negative Aspects of the Program
   a) In what ways has IMMM program failed to meet your expectations and/or needs?
   b) What are some drawbacks or challenges to the program?
      - Were there any issues that you experienced in the program?
        - Intake process
        - Managing with school load
        - Coordinating schedule with buddy

11) Suggestions for Improvement
   a) Are there any suggestions for changes or improvements in the program in the future?

To end the interview, I will ask you one final question to summarize your experience in the IMMM program.

12) How will you remember this experience?

Thank you for participating in this interview. Before we end, do you have any other information that you think would be useful for me?

Do you have any questions for me?

Thank you for taking the time out of your day to meet with me. Your answers from this interview will be very helpful to me in my research.

APPENDIX E

Recruitment Materials

Recruitment Letter for IMMM Participants Qualtrics Survey

Hello,

My name is Heather and I am in the second year of my Master of Kinesiology. As part of my thesis, I am evaluating WLU's I Move My Mood Program. I was a participant in the program during my undergraduate degree and this experience inspired me to conduct my research on this program. The purpose of this study is to determine the effectiveness of the I Move My Mood program through exploring the lived experiences of current participants and volunteers, past participants and volunteers, and program stakeholders of the program and analyzing program data.

If you are a current participant, or have completed the I Move My Mood program, I would like to invite you to fill out an anonymous survey regarding your experiences in this program. The survey will take approximately 5 to 10 minutes to complete and can be accessed through https://wlu.ca1.qualtrics.com/jfe/form/SV_bkFqKpShHyWRizb.

Further, if you would like to discuss your experiences with me, I am inviting participants, past participants and volunteers of the I Move My Mood Program to participate in a one-on-one interview to understand your experiences after completing the program. The interview will take approximately 45 minutes to one hour to complete.

For more information regarding the research project, or if you would like to participate in the study, please contact me at tunk4460@mylaurier.ca

Thanks.

Sincerely,

Heather Tunks

Recruitment Posters

Are You a Current Volunteer in the I Move My Mood Program?

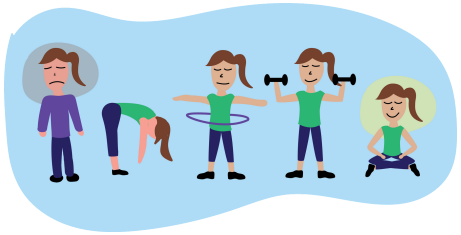
You are invited to participate in a research study that will explore the lived experiences of individuals in the I Move My Mood program!

Study Purpose:

To understand the lived experiences of students participating in a mental health physical activity program.

What Will You Do:

1) Background Questionnaire and Physical Activity Questionnaire
2) Two One-On-One Interviews



If you would like to participate in the research study, please contact:

Heather Tunks

E-mail: tunk4460@mylaurier.ca

REB # 5827

Have You Participated in the I Move My Mood Program as a **Participant or Volunteer**?

You are invited to participate in a research study that will explore the lived experiences of individuals in the I Move My Mood program!

Study Purpose:

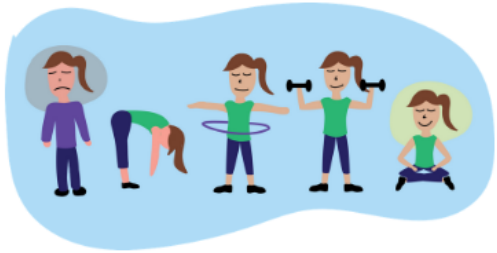
To understand the lived experiences of students participating in a mental health physical activity program.

What Will You Do:

1) Background Questionnaire and Physical Activity Questionnaire
2) One One-on-One Interview

If you would like to participate in the research study, please contact:

Heather Tunks
E-mail: tunk4460@mylaurier.ca



REB # 5827

APPENDIX F

Informed Consent Forms

Wilfrid Laurier University Informed Consent Statement for Past Participants

I Move My Mood: Exploring the Influence of a Mental Health Physical Activity

Principal Investigator: Heather Tunks (Graduate Student, Department of Kinesiology)

Faculty supervisors: Dr. Paula Fletcher (Professor, Department of Kinesiology)
Dr. Jennifer Robertson-Wilson (Professor, Department of Kinesiology)

You are invited to participate in a research study. The purpose of this study is to determine the effectiveness of the I Move My Mood (IMMM) program through exploring the lived experiences of current participants, past participants and current volunteers of the program and analyzing program data. The researcher is a Laurier graduate student in the Department of Kinesiology working under the supervision of Dr. Paula Fletcher and Dr. Robertson-Wilson.

Information
After providing informed consent to participate in the study, you will complete a face sheet that will provide the researcher with relevant background information and context prior to the first interview. Further, you will complete the Godin Leisure-Time Exercise questionnaire prior to the e-mail interview to understand the frequency and intensity of physical activity the you are obtaining prior to and after participating in the IMMM program. You will be asked to complete one follow-up e-mail interview that will take 15 – 30 minutes to understand your experience after completing the program. In this interview, you will be asked about your experience with depression and/or anxiety.

Data from approximately 5 – 10 research participants that are (1) a WLU student and previous participant in the I Move My Mood program, and (2) have provided active, informed consent to participate in the study will be collected for this study.

Direct personal quotes of participants may be used in the final research report to bring forth the voice of the participants in the I Move My Mood program. If you do not wish to have direct quotes used, please leave your consent to the use of direct quotes blank. E-mail interview transcripts will be destroyed by September 2, 2024.

Risks
As a result of your participation in this study you may experience psychological risks including boredom with the e-mail interview, regret over the revelation of personal information to an interviewer and disclosure of personal information that may make you feel upset or ashamed. Further, the information that you reveal may reflect either positively or negatively on the I Move My Mood program.

The following safeguards will be used to minimize any risks: you do not have to answer any questions on the face sheet, Godin Leisure-Time Exercise Questionnaire, or e-mail interview if you feel uncomfortable, or do not want to provide a response. Further, participation in the research study can be withdrawn at any time and your data will be destroyed. If you need help, advice or assistance coping with any negative emotions, you will be referred to the Wellness Centre staff.

To minimize the risks of disclosing negative information about the Wellness Centre, you will be assigned a pseudonym, and only the researcher and her supervisors will know the participant identities. A list of names identifying participants to their pseudonym will be kept in secured and locked in a drawer in the office of Dr. Paula Fletcher. The consent forms and other non-identified information will be stored in a secured and locked drawer in the office of Dr. Jennifer Robertson-Wilson.

You are free to discontinue the study at any time and to choose not to respond to any question.

Benefits
You may benefit from the participation in this research project by contributing to the development of a mental health physical activity program on a university campus. This will allow for improvements to be made to the program and may increase the number of students accessing this program. The research will contribute to the body of literature on implementing mental health physical activity programming for university students struggling with anxiety and/or depression.

Confidentiality
The confidentiality/anonymity of your data will be ensured by assigning study participants to a pseudonym, and only the researcher and her supervisors will know the participant identities. Any direct quotations will be anonymous and each participant will have the right to refuse the use of their direct quotes in the results of this research. A list of names identifying participants to their pseudonym will be kept in secured and locked in a drawer in the office of Dr. Paula Fletcher. The consent forms and other non-identified information will be stored in a secured and locked drawer in the office of Dr. Jennifer Robertson-Wilson. The de-identified data will be kept for 5 years and will then be destroyed by the principal investigator. Identifying information will be stored separately from the data and will be kept for 5 years and will then be destroyed by the principal investigator. If you consent, quotations will be used in write-ups/presentations and will not contain information that allows you to be identified. Confidentiality may be broken when a participant and/or volunteer is in distress or requires professional assistance.

Compensation
There will be no compensation for participating in this research study.

Contact
If you have questions at any time about the study or the procedures or you experience adverse effects as a result of participating in this study you may contact the researcher, Heather Tunks, at tunk4460@mylaurier.ca or (519) 884-0710 x 2519. You may also contact Dr. Paula Fletcher at

pfletcher@wlu.ca or (519) 884-0710 x 4159, or Dr. Jennifer Robertson-Wilson at jrobertsonwilson@wlu.ca (519) 884-0710 x 3928.

This project has been reviewed and approved by the University Research Ethics Board (REB# 5827), which receives funding from the Research Support Fund. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Jayne Kalmar, PhD, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-1970, extension 3131 or REBChair@wlu.ca.

Participation

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. You have the right to refuse to answer any question or participate in any activity you choose.

If you withdraw from the study, you can request to have your data removed/destroyed by e-mailing or calling the principal researcher until April 30, 2018.

Feedback and Publication

The results of this research might be published/presented in a thesis, book, journal article, conference presentation, class presentation. The WLU Student Wellness Centre will receive a report upon completion of the project. The results of this research may be made available through Open Access resources. You can request the executive summary by e-mailing tunk4460@mylaurier.ca.

Consent
Please only sign and date the sections that you consent to. Otherwise, please leave blank.

I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I agree to be audiotaped during the one-on-one interviews.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I agree consent to the use of direct quotations in presentations/papers resulting from this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I would like to have a copy of the study findings sent to me upon completion in the form of a summary report.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

It is advised that you print or save this consent form and/or record the researcher contact information in the case that you have any questions or concerns.

Wilfrid Laurier University Informed Consent Statement for Online Survey (IMMM Participants)

I Move My Mood (IMMM): Exploring the Influence of a Mental Health Physical Activity

Primary Investigator: Heather Tunks (Graduate Student, Department of Kinesiology)

Faculty supervisors: Dr. Paula Fletcher (Professor, Department of Kinesiology)
Dr. Jennifer Robertson-Wilson (Professor, Department of Kinesiology)

You are invited to participate in an online survey portion of a research study. The purpose of this study is to determine the effectiveness of the IMMM program by exploring the lived experiences of current participants and volunteers, past participants and volunteers, and program stakeholders of the program and analyzing program data. The primary investigator is a Laurier graduate student in the Department of Kinesiology working under the supervision of Dr. Paula Fletcher and Dr. Robertson-Wilson.

Information
After providing informed consent to participate in the study, you will complete a 5 – 10 minute on-line survey. In this survey, you will be asked about relevant background information, your experience in the I Move My Mood Program, and program recommendations. The survey will be completed online and your identify will be anonymous. The survey will remain open until April 30th, 2019.

Data from research participants who (1) are a WLU student and a current participant in the I Move My Mood Program between September 1st 2018 and April 30th 2019, and/or (2) are a past participant in the I Move My Mood Program, and (3) have provided active, informed consent to participate in the study will be collected for this portion of the study. Those who intend to or have already completed an interview for this research study are still eligible to participate in the survey.

Direct personal quotes from participants may be used in the final research report to bring forth the voice of the participants in the I Move My Mood program. If you do not wish to have direct quotes used, please click 'no' on the survey consent form.

Risks
As a result of your participation in this study you may experience psychological risks including boredom with the survey, regret over the revelation of personal information and disclosure of personal information that may make you feel upset or ashamed. Further, the information that you reveal may reflect either positively or negatively on the I Move My Mood program.
The following safeguards will be used to minimize any risks: you do not have to answer any questions on the survey if you feel uncomfortable, or do not want to provide a response. Further, participation in the research study can be withdrawn at any time and your data will be destroyed.

If you need help, advice or assistance coping with any negative emotions, you will be referred to the Wellness Centre staff.

To minimize the risks of any negative feelings that may arise from providing any responses, your information will remain confidential and no immediate personal data (e.g. names, addresses) will be collected.

You are free to discontinue the study at any time and to choose not to respond to any question.

Benefits
You may benefit from the participation in this research project by contributing to the development of a mental health physical activity program on a university campus. This will allow for improvements to be made to the program and may increase the number of students accessing this program. The research will contribute to the body of literature on implementing mental health physical activity programming for university students struggling with anxiety and/or depression.

Confidentiality
The confidentiality/anonymity of your data will be ensured as no immediate personal data (e.g. names, addresses) will be collected. Any direct quotations will be anonymous and each participant will have the right to refuse the use of his/her direct quotes in the results of this research. If printed, the participant responses will be stored in a secured and locked drawer in the office of Dr. Jennifer Robertson-Wilson. Your IP address will not be collected. The data will be kept for 5 years and will then be destroyed by the principal investigator. If you consent, quotations will be used in write-ups/presentations and will not contain information that allows you to be identified. While in transmission on the internet, the confidentiality of data cannot be guaranteed. Confidentiality may be broken when a participant is in distress or requires professional assistance.

Compensation
There will be no compensation for participating in this research study.

Contact
If you have questions at any time about the study or the procedures or you experience adverse effects as a result of participating in this study you may contact the researcher, Heather Tunks, at tunk4460@mylaurier.ca or (519) 884-0710 x 2519. You may also contact Dr. Paula Fletcher at pfletcher@wlu.ca or (519) 884-0710 x 4159, or Dr. Jennifer Robertson-Wilson at jrobertsonwilson@wlu.ca (519) 884-0710 x 3928.

This project has been reviewed and approved by the University Research Ethics Board (REB# 5827), which receives funding from the Research Support Fund. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Jayne Kalmar, PhD, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-1970, extension 3131 or REBChair@wlu.ca.

Participation
Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. You have the right to refuse to answer any question or participate in any activity you choose.

If you withdraw from the study, you can request to have your data removed/destroyed by e-mailing or calling the principal researcher until April 30, 2018.

Feedback and Publication
The results of this research might be published/presented in a thesis, book, journal article, conference presentation, class presentation. The WLU Student Wellness Centre will receive a report upon completion of the project. The results of this research may be made available through Open Access resources. You can request the executive summary by e-mailing tunk4460@mylaurier.ca.

Consent
Please only sign and date the sections that you consent to. Otherwise, please leave blank.

I have read and understand the above information. I agree to participate in this study.
(a) Yes.
(b) No. (If no, they cannot access the survey)

I agree consent to the use of direct quotations in presentations/papers resulting from this study.
(a) Yes.
(b) No.

If you would like to have a copy of the study findings in the form of a summary report, please contact the researcher via email in September of 2019.

It is advised that you print or save this consent form and/or record the researcher contact information in the case that you have any questions or concerns.

Wilfrid Laurier University Informed Consent Statement for Current Volunteers

I Move My Mood: Exploring the Influence of a Mental Health Physical Activity

Principal Investigator: Heather Tunks (Graduate Student, Department of Kinesiology)

Faculty supervisors: Dr. Paula Fletcher (Professor, Department of Kinesiology)
Dr. Jennifer Robertson-Wilson (Professor, Department of Kinesiology)

You are invited to participate in a research study. The purpose of this study is to determine the effectiveness of the I Move My Mood (IMMM) program through exploring the lived experiences of current participants, past participants and current volunteers of the program and analyzing program data. The researcher is a Laurier graduate student in the Department of Kinesiology working under the supervision of Dr. Paula Fletcher and Dr. Robertson-Wilson.

Information
After providing informed consent to participate in the study, you will complete a face sheet that will provide the researcher with relevant background information and context prior to the first interview. Further, you will complete the Godin Leisure-Time Exercise questionnaire prior to each interview to understand the frequency and intensity of physical activity the you are obtaining prior to and after participating in the IMMM program. You will participate in two 45 – 60-minute, one-on-one semi-structured interviews. If applicable, you will be asked about your experience with depression and/or anxiety in these interviews. Interviews will be conducted at the beginning and end of the IMMM program, at a location on campus that is comfortable for both parties (e.g. researcher's lab, quiet study space). Finally, you will complete one member check e-mail interview that will take approximately 15 – 30 minutes. The member check will allow you to review your responses and remove any information that you are uncomfortable disclosing.

Data from approximately 5 – 10 research participants that (1) are a WLU student (at any level of study) and a volunteer in the I Move My Mood Program between September 1st 2018 and April 30th 2019, and (2) have provided active, informed consent to participate in the study will be collected for this study.

As a part of this study you will be audio-recorded for research purposes. You have the right to refuse being recorded. Only Heather Tunks, Dr. Paula Fletcher and Dr. Jennifer Robertson-Wilson will have access to these recordings and information will be kept confidential. The recordings will be transcribed by May 30, 2019 and deleted after the member check interview. Interview transcripts will be destroyed by September 2, 2024.

Direct personal quotes of participants may be used in the final research report to bring forth the voice of the participants in the I Move My Mood program. If you do not wish to have direct quotes used, please leave your consent to the use of direct quotes blank. If you consent to use

direct personal quotes, but want to look over your interview transcript before any direct quotes are published, you will be given the opportunity to do so during the member check interview. In this interview, you may review your transcript and omit any quotes that you do not want to be used in the research study.

Risks

As a result of your participation in this study you may experience psychological risks including boredom with interviews, regret over the revelation of personal information to an interviewer and disclosure of personal information that may make you feel upset or ashamed. Further, the information that you reveal may reflect either positively or negatively on the I Move My Mood program.

The following safeguards will be used to minimize any risks: you do not have to answer any questions on the face sheet, Godin Leisure-Time Exercise Questionnaire, or interviews if you feel uncomfortable, or do not want to provide a response. Further, participation in the research study can be withdrawn at any time and your data will be destroyed. Member checks will also allow you the opportunity to remove any information that you are uncomfortable disclosing. If you need help, advice or assistance coping with any negative emotions, you will be referred to the Wellness Centre staff.

To minimize the risks of disclosing negative information about the Wellness Centre, you will be assigned a pseudonym, and only the researcher and her supervisors will know the participant identities. A list of names identifying participants to their pseudonym will be kept in secured and locked in a drawer in the office of Dr. Paula Fletcher. The consent forms and other non-identified information will be stored in a secured and locked drawer in the office of Dr. Jennifer Robertson-Wilson.

You are free to discontinue the study at any time and to choose not to respond to any question.

Benefits

You may benefit from the participation in this research project by contributing to the development of a mental health physical activity program on a university campus. This will allow for improvements to be made to the program and may increase the number of students accessing this program. The research will contribute to the body of literature on implementing mental health physical activity programming for university students struggling with anxiety and/or depression.

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years and will then be destroyed by the principal investigator. Identifying information will be stored separately from the data and will be kept for 5 years and will then be destroyed by the principal investigator. If you consent, quotations will be used in write-ups/presentations and will not contain information that allows you to be identified. You will be able to vet your quotations by participating the member check e-mail. While in transmission on the internet, the confidentiality of data cannot be guaranteed. Confidentiality may be broken when a participant and/or volunteer is in distress or requires professional assistance.

Compensation
There will be no compensation for participating in this research study.

Contact
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Consent

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I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I agree to be audiotaped during the one-on-one interviews.

Participant's signature _____ Date _____

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I would like to have a copy of the study findings sent to me upon completion in the form of a summary report.

Participant's signature _____ Date _____

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Wilfrid Laurier University Informed Consent Statement for Past Volunteers

I Move My Mood: Exploring the Influence of a Mental Health Physical Activity

Principal Investigator: Heather Tunks (Graduate Student, Department of Kinesiology)

Faculty supervisors: Dr. Paula Fletcher (Professor, Department of Kinesiology)
Dr. Jennifer Robertson-Wilson (Professor, Department of Kinesiology)

As a past volunteer of the I Move My Mood program (IMMM), you are invited to participate in a research study. The purpose of this study is to determine the effectiveness of the IMMM program through exploring the lived experiences of current participants and volunteers, past participants and volunteers, and program stakeholders of the program and analyzing program data. The researcher is a Laurier graduate student in the Department of Kinesiology working under the supervision of Dr. Paula Fletcher and Dr. Robertson-Wilson.

Information

After providing informed consent to participate in the study, you will complete a face sheet that will provide the researcher with relevant background information and context prior to the first interview. Further, you will complete the Godin Leisure-Time Exercise questionnaire prior to the interview to understand the frequency and intensity of physical activity the you are obtaining after participating in the IMMM program. You will participate in one 45 – 60 minute, one-on-one semi-structured interview. In this interview, you will be asked about your experience with depression and/or anxiety. The interview will be conducted at a location on campus that is comfortable for both parties (e.g. researcher's lab, quiet study space). Finally, you will complete one member check e-mail interview that will take approximately 15 – 30 minutes. The member check will allow you to review your responses and remove any information that you are uncomfortable disclosing.

Data from approximately 5 – 10 research participants that are (1) a past WLU student volunteer in the I Move My Mood program, and (2) have provided active, informed consent to participate in the study.

Direct personal quotes of participants may be used in the final research report to bring forth the voice of the participants in the I Move My Mood program. If you do not wish to have direct quotes used, please leave your consent to the use of direct quotes blank. Interview transcripts will be destroyed by September 2, 2024.

Risks

As a result of your participation in this study you may experience psychological risks including boredom with the interview, regret over the revelation of personal information to an interviewer and disclosure of personal information that may make you feel upset or ashamed. Further, the

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Feedback and Publication

The results of this research might be published/presented in a thesis, book, journal article, conference presentation, class presentation. The WLU Student Wellness Centre will receive a report upon completion of the project. The results of this research may be made available through Open Access resources. You can request the executive summary by e-mailing tunk4460@mylaurier.ca.

Consent

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I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I agree to be audiotaped during the one-on-one interview.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I agree consent to the use of direct quotations in presentations/papers resulting from this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

I would like to have a copy of the study findings sent to me upon completion in the form of a summary report.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

It is advised that you print or save this consent form and/or record the researcher contact information in the case that you have any questions or concerns.

APPENDIX G

Volunteer Interview Guides

Interview 1 (Time 1): Current Volunteers

To start off interview, I would like to learn a little bit about you.

1) Introductory Question
    a) Tell me about a typical week as a student.
        - Tell me about your program
            - Do you enjoy your program? Why or why not?
        - Tell me about your workload?
            - How heavy is your workload?
            - Do you feel you can manage your workload? Why or why not?
        - Describe to me the activities you are involved in both on campus and off campus.
            - Do you feel like your schedule is busy?
        - Do you work/volunteer?
        - Tell me about how do you manage your stress while in school?

Thanks for telling me a little bit about your you and your experience as a student. Next, I would like to talk about your past and current experiences with anxiety and depression. If you do not want to discuss this, we will move on to the next section. Is that okay if we talk about that for a few minutes?

2) Symptoms of Depression and Anxiety
    a) Have you experienced depression or anxiety before?
    b) If Yes, can you tell me about your experience?
        - When did you start experiencing signs and symptoms of depression/anxiety?
        - Tell me about how you got your diagnosis.
            - When were you diagnosed?
            - How long have you dealt with your condition?
        - Has your condition changed over time?
            - When was your condition at its worst?
            - When was your condition at its best?
        - How does your condition manifest in a typical day/week/month?
        - Does it prevent you from doing the activities you enjoy?
        - Can you provide 1 word to describe your depression/anxiety?
            - On a bad day, what is one word to describe your depression/anxiety?
            - On a good day what is one word to describe your depression/anxiety?
    c) **If No**, do you have any experience with depression/anxiety?
        - **Can you tell me about your experience?**
    d) What does anxiety/depression mean to you?

If the participant answered YES to the second question: Now that we have discussed your experience with _____ (condition), I would like to discuss your experience with managing anxiety/depression. Is that okay if we discuss this?

3) Treatment Knowledge/Strategies
    a) Tell me about the different treatments, if any, you have tried for your anxiety/depression.
        - What treatments, if any have been prescribed to you?
        - What treatments, if any, would you consider to have been successful for you?
        - What treatments, if any, have not worked for you?
    b) Have you used other treatment or support strategies?
        - If yes, tell me about them.
        - Other services?
        - Medication?
        - Accessible Learning Centre (ALC)?
    c) What has your experience been like accessing services for anxiety/depression?
        - On campus?
        - Off campus?
        - Has your experience been positive or negative?
            - Explain why?
        - Do you have any advice for someone else managing anxiety and/or depression with respect to treatment and services?

If the participant answered **NO** to the second question: Now that we have discussed your experience with _____ (condition), I would like to discuss your experience with anxiety/depression. Is that okay if we discuss this?

    a) Tell me about the different treatments you have heard about for managing anxiety/depression.
    b) Describe to me the different services offered on campus for students with anxiety/depression.

Thank you for describing your experience with anxiety and depression. Now, I'd like to move on and talk about your physical activity **prior to participating** in the I Move My Mood program.

4) Role of Physical Activity
    a) Describe to me your current physical activity behaviours, if any, and the role they play in your life <u>prior to participating</u> in I Move My Mood?
        - What activities do you participate in?
        - How many times per week do you engage in physical activity?
        - Where do you engage in physical activity?
            - Do you use services at Laurier?
            - Do you use any off-campus activities or facilities?

b) What, if any barriers are there to your participation in physical activity?
   - On campus?
   - Off campus?

Now that we have talked about your physical activity before participating in the IMMM program, I would like to move on and talk about how you found out about the program and the intake process.

5) Program Discovery
   a) Describe how you found out about the IMMM program?
      - How did you hear about the program?
        - Who told you about the program?
      - Were you referred by anyone to participate in the program?
   b) Describe to me the reasons why you decided to participate in IMMM?
   c) How was the referral and intake process of becoming a volunteer?
      - Was the process easy or difficult?
      - Is there anything you would like to change about the intake or referral process?
   d) How long have you been a volunteer for the IMMM program?
   e) Have you experienced any issues or barriers to participating in the program?
      - If yes, describe the barriers and/or issues you have experienced.

Next, I will ask you about your experience with training to become a volunteer.

6) Volunteer Training and Preparation
   a) What did you learn after participating in the orientation day?
   b) Do you feel confident utilizing the Athletics Complex with your participant?
   c) On scale of 1-10 How prepared do you feel to be a volunteer in the program?
      a. Why?
   d) Did you feel the training was adequate?
      a. Why?
   e) What, if any, improvements would you recommend for volunteer training and orientation?

Thank you for providing some feedback regarding your experience with the volunteer training. Next, I will ask you some questions regarding your experience so far, and your expectations for the program.

7) Program Physical Activity Experience
   a) Please tell me about your experience in the I Move My Mood program so far.
      - Walk me through a typical exercise session with your buddy.
      - What activity did your buddy decide to do?
      - How often do you exercise with your buddy?
      - How intense are the exercise sessions?

8) Goals and Expectations
    a) What, if anything, are you hoping to get out of the program?
    b) What effect, if any, do you anticipate the program could have for you?
    c) Do you think physical activity will be a useful management strategy for anxiety or depression?

Thank you for participating in this interview. Before we end, do you have any other information that you think would be useful for me?

Do you have any questions for me?

[Turn off Recorder]

Thank you for taking the time out of your day to meet with me. Your answers from this interview will be very helpful to me in my research.

Interview 2 (Time 2): Current Volunteers

Thank you for meeting with me today. To start the interview, I would like to discuss your experience in your academic program this semester.

1) Academic Program & Workload Stress
    a) Describe to me your workload throughout the semester.
        - How heavy was your workload?
        - Did you find this term difficult/easy?
        - How, if at all, were you able to manage your workload this semester?
    b) Describe to me the activities you are involved in both on campus and off campus.
        - Did you work or volunteer?
        - Did you participate in any extra-curricular activities?
        - Do you feel like your schedule was busy? Why or why not?
    c) What strategies, if any, have helped you deal with stress?

Now that we have discussed your experience in your academic program this semester, we will now talk about your experience with physical activity **after participating** in IMMM.

2) Role of Physical Activity
    a) Describe to me your current physical activity behaviours, if any.
        - How, if at all, did the role of physical activity change in your life after participating in IMMM?
        - What activities do you participate in?
        - How many times per week do you engage in physical activity?
        - Where do you engage in PA?
            - Do you use services at Laurier?
            - Do you use any off-campus activities or facilities?
        - How, if at all, has your physical activity changed after participating in IMMM?
    b) Describe to me your confidence accessing PA facilities (such as the Athletics complex or other facilities).
        - How, if at all, has this changed from before the program?
    c) What, if any, barriers are there to your participation in physical activity?
    d) Moving forward, do you think will you continue to participate in PA?
        - If so, how often?

Now we will discuss the types of exercise you did with your buddy, and the role your buddy played in your experience, and your personal experience in the program.

3) Types of Physical Activity
    a) Describe to me a typical exercise session with your buddy
        - What do you do?
        - Describe the exercise setting to me.

b) How often did you exercise with your buddy?
c) On a scale of 1 to 10, how would you rate your exertion during exercise sessions?
    - How intense were the exercise sessions?
d) Did you enjoy the exercise sessions?
    - Why or why not?

4) Role of Volunteer and Experience with Participant
    a) What role, if any, have you played in your participant's experience?
    b) How, if at all, have you supported your participant throughout the program?
    c) On a scale of 1 to 10, rate your satisfaction of your participant.
        a. Why did you select that number?
    d) In what ways did your participant meet your expectations?
    e) In what ways did your participant fail to meet your expectations?

Ask question 5 if the volunteer has personally dealt with anxiety/depression, if the volunteer has not, move onto question 6.

Next, I would like to talk about your past and current experiences with _____ (condition). If you do not want to discuss this, we will move on to the next section. Is that okay if we talk about that for a few minutes?

5) Symptoms of Depression and Anxiety
    a) Tell me about your experience with _____ (condition) this term.
    b) To what extent, if at all, has _____ (condition) affected the activities you enjoy?
    c) How, if at all, did your depression/anxiety symptoms change over the course of the semester?
        - How, if at all, did your condition manifest in a typical day/week/month?
    d) How, if at all, did you manage your symptoms of anxiety and depression throughout the semester?
        - Did you access additional services or therapies?
    e) If at all, describe how the IMMM program helped you manage your depression/anxiety symptoms?

Thank you for discussing your experience with _____ (condition). Now, we will talk about your experience accessing services on and off-campus services.

6) Program Discovery
    a) Have you experienced any issues or barriers to participating in the IMMM program?
        - If yes, please describe the barriers and/or issues you have experienced.
    b) How, if at all, has participating in IMMM helped you access the Athletics Complex?
        - Will you participate in more classes? Attend the gym more?
    c) How, if at all, has participating in IMMM helped you access other services?
        - Other gym/activity, counselling services, other treatment methods?

7) Goals and Expectations

a) During our last interview, you mentioned that you were hoping to achieve _____ from participating in IMMM. Did the program allow you to achieve what you expected?
b) After participating in the IMMM program, did you discover other reasons for participating that you did not initially anticipate?
c) After completing the program, what are your next steps?
    - Do you plan to continue exercising?
    - Are you going to volunteer for the IMMM program again?
        - Why or why not?

Next, we will discuss your experience in the program and the value the program had for you.

8) Program Experience
    a) How would you describe this program to someone who has not experienced it?

9) Program Value and Positive Aspects
    a) In what ways has the IMMM program met your expectations and/or needs?
        - What, if any, benefits have you experienced from the program?
    b) On a scale of 1 to 10, how likely are you to recommend this program to someone else?
        - Would you recommend it to a friend?
    c) Have you told anyone about the program?

    Next, we will discuss some drawbacks to the IMMM program.

10) Negative Aspects of the Program
    a) In what ways has IMMM program failed to meet your expectations and/or needs?
    b) What are some drawbacks or challenges to the program?
        - Were there any issues that you experienced in the program?
            - Intake process
            - Training
            - Managing with school load
            - Coordinating schedule with buddy

11) Suggestions for Improvement
    a) Are there any suggestions for changes or improvements you would recommend for the program?
        - Intake process, training, managing with school load, coordinating schedules

To end the interview, I will ask you one final question to summarize your experience in the IMMM program.

12) How will you remember this experience?

Thank you for participating in this interview. Before we end, do you have any other information that you think would be useful for me?

Do you have any questions for me?

[Turn off Recorder]

Thank you for taking the time out of your day to meet with me. Your answers from this interview will be very helpful to me in my research.

Past Volunteers Interview Guide

Thank you for meeting with me today. To start the interview, I would like to discuss your experience in your academic program this semester.

1) Academic Program & Workload Stress
    a) Describe to me your workload throughout the semester.
        - Was the workload heavy/light?
        - Did you find this term difficult/easy?
        - How, if at all, were you able to manage your workload this semester?
    b) Describe to me the activities you are involved in both on campus and off campus.
        - Did you volunteer?
        - Did you work?
        - Did you participate in any extra-curricular activities?
    c) What strategies, if any, have helped you deal with stress?

Now that we have discussed your experience in your academic program this semester, we will now talk about your experience with physical activity **after participating** in IMMM.

2) Role of Physical Activity
    a) Describe to me how, if at all, did the role of physical activity change in your life after participating in IMMM?
        - What activities do you participate in?
        - How many times per week do you engage in physical activity?
        - Where do you engage in PA?
            - Do you use services at Laurier?
            - Do you use any off-campus activities or facilities?
        - How, if at all, has your physical activity changed after participating in IMMM?
    b) Describe to me your confidence accessing PA facilities (such as the Athletics complex or other facilities).
        - How, if at all, has this changed from before the program?
    c) What, if any, barriers are there to your participation in physical activity?
    d) Moving forward, do you think will you continue to participate in PA?
        - If so, how often?

Now we will discuss the types of exercise you did with your buddy, and the role your buddy played in your experience, and your personal experience in the program.

3) Types of Physical Activity
    a) Describe to me a typical exercise session with your buddy
        - What do you do?
    b) How often did you exercise with your buddy?
    c) How intense are the exercise sessions?

- On a scale of 1 to 10, how would you rate your exertion during exercise sessions?

d) Did you enjoy the exercise sessions?

4) Role of Volunteer and Experience with Participant
   a) What role, if any, have you played in your participant's experience?
   b) How, if at all, have you supported your participant throughout the program?
   c) In what ways, if any, did your participant meet your expectations?
   d) In what ways, if any, did your participant fail to meet your expectations?
   e) On a scale of 1 to 10, rate your satisfaction of your participant. *with being a volunteer

Ask question 5 if the volunteer has personally dealt with anxiety/depression, if the volunteer has not, move onto question 6.

Next, I would like to talk about your past and current experiences with _____ (condition). Is that okay if we talk about that for a few minutes?

5) Symptoms of Depression and Anxiety
   a) Tell me about your experience with _____ (condition) this term.
   b) How, if at all, did your depression/anxiety symptoms change over the course of the semester?
      - How, if at all, did your condition manifest in a typical day/week/month?
   c) How, if at all, did you manage your symptoms of anxiety and depression throughout the semester?
      - Did you access additional services?
   d) If at all, describe how the IMMM program helped you manage your depression/anxiety symptoms?

Thank you for discussing your experience with _____ (condition). Now, we will talk about your experience accessing services on and off-campus services.

6) Program Discovery
   a) How, if at all, has participating in IMMM helped you access the Athletics Complex?
      - Will you participate in more classes? Attend the gym more?
   b) How, if at all, has participating in IMMM helped you access other services?
      - Other gym/activity, counselling services, other treatment methods?
      - *How did you find out about the IMMM program?*

7) Goals and Expectations
   a) What were you hoping to achieve from participating in the I Move My Mood Program?
      - What goals or expectations did you have for the program?
   b) Did the program allow you to achieve what you expected?

c) After participating in the IMMM program, did you discover other reasons for participating that you did not initially anticipate?
d) After completing the program, what are your next steps?
    - Do you plan to continue exercising?
    - Are you going to volunteer for the IMMM program again?

Next, we will discuss your experience in the program and the value the program had for you.

8) Program Experience
    a) How would you describe this program to someone who has not experienced it?

9) Program Value and Positive Aspects
    a) In what ways, if at all has the IMMM program met your expectations and/or needs?
        - What, if any, benefits have you experienced from the program?
    b) Have you told anyone about the program?
        - Would you recommend it to a friend?

Next, we will discuss some drawbacks to the IMMM program.

2) Negative Aspects of the Program
    a) In what ways, if at all, has IMMM program failed to meet your expectations and/or needs?
    b) What are some drawbacks or challenges to the program, if any?
        - Were there any issues that you experienced in the program?
            - Intake process
            - Training
            - Managing with school load
            - Coordinating schedule with buddy

3) Suggestions for Improvement
    a) Are there any suggestions for changes or improvements in the program in the future?

To end the interview, I will ask you one final question to summarize your experience in the IMMM program.

4) How will you remember this experience?

Thank you for participating in this interview. Before we end, do you have any other information that you think would be useful for me?

Do you have any questions for me?

Thank you for taking the time out of your day to meet with me. Your answers from this

interview will be very helpful to me in my research.

APPENDIX H

Qualtrics Survey for IMMM Participants

I Move My Mood (IMMM) Exit Survey

Demographic Information

I am a: (a) current participant.
(b) past participant.

Please identify your gender: _____

What is your student status? Full Time Part Time Other (Please Specify)

Are you: an undergraduate student a graduate student

What faculty are you part of? Arts, Science, Music, Business, Social Work, Education, Other

What program are you in?

What is your year of study?

The next two questions are about your health.

1. Do you have any physical health conditions
   (a) Yes. Please List.
      a. How long have you dealt with this/these condition(s)? Fill in the blank.
         _____ Months _____ Years
      b. When were you diagnosed with this/these condition(s)? (Month, Year)
      c. What, if any, pharmacological treatments have you been prescribed across the lifespan of your condition(s) (e.g. antidepressant medication)?
      d. What, if any, other lifestyle treatments have you tried?
   (b) No.

2. Do you have any mental health conditions?
   (a) Yes. Please List.
      a. How long have you dealt with this/these condition(s)?
         _____ Months _____ Years
      b. When were you diagnosed with this/these condition(s)? (Month, Year)
      c. What, if any, pharmacological treatments have you been prescribed across the lifespan of your condition(s) (e.g. antidepressant medication)?
      d. What, if any, other lifestyle treatments have you tried?
   (b) No.

Information About I Move My Mood

Why did you agree to give IMMM a try?

What activities, if any, did you participate with your buddy (e.g. group exercise, weight room)?

How many session(s) did you complete with your buddy?

Were your expectations for the program met?
(a) Yes.
(b) Somewhat.
(c) No.
Please explain response.

Will you continue participating in physical activity after completing the IMMM program?
(a) Yes.
(b) No.
(c) Unsure.

Program Satisfaction and Feedback
Were you satisfied with IMMM?
(a) Yes.
(b) Somewhat.
(c) No.

Please explain response.
What, if anything, did you like about IMMM?

What, if anything, did you dislike about IMMM?

What, if any, suggestions would you have for improvement of the IMMM program?

Would you recommend IMMM to a friend? Yes No
*Optional – Please explain response.

Is there any other information you would like to add about IMMM and your experience?

Thank you for taking the time to complete this survey. Your feedback and responses are greatly appreciated.

If you have any questions or comments regarding the study or the procedures, or if you would like to receive the results of the study upon completion, please feel free to contact the lead researcher, Heather Tunks by email (tunk4460@mylaurier.ca).

Thank you and have a great day! You may close the survey window now.

APPENDIX I

Recommendations for IMMM

Table 4. Recommendations for IMMM

1. It is recommended IMMM clarify program goals and tailor programming to help IMMM participants achieve the desired program outcomes.
    a. Determine whether the goal of IMMM is to (1) help participants become comfortable in the recreation complex; (2) use physical activity to improve IMMM participants' mental health; (3) use IMMM as a stepping stone for IMMM participants to engage in physical activity independently; or (4) a different goal.
    b. Tailor programming to achieve desired outcomes. For example, if the goal of IMMM is to utilize physical activity to improve anxiety and/or depression symptoms, ensure participants are obtaining the minimum recommended levels of physical activity to experience changes in their symptoms.
2. Clarify the "scope of practice" for IMMM volunteers by determining the type of peer support and definition of "peer support" that applies to IMMM program goals.
    a. Consider the recommendations of Davidson and Colleagues (2006) and Aschbrenner and Colleagues (2015) by hybridizing the volunteer role, or allowing volunteers to occupy a "middle ground" between being an exercise "partner" and training and/or discussing mental illness around their IMMM participants.
    b. It is recommended IMMM differentiate the volunteers' role from other program support staff (such as counsellors).
3. Establish clear guidelines and training for IMMM volunteers that reflect the appropriate "scope of practice" for volunteers.
    a. Clearly identify the professional boundaries between IMMM volunteers and participants and communicate these boundaries to both the volunteers and IMMM participants.
    b. Establish a training protocol for IMMM volunteers which clarifies the volunteers' "scope of practice" and procedures for emergency situations.
    c. Establish a training protocol for IMMM volunteers who are absent from training.
4. Increase the frequency and/or duration of exercise for IMMM participants.
    a. Consider allowing flexibility in programming through incorporating drop-in sessions and make-up sessions for IMMM participants.
    b. Consider expanding the duration of programming to account for late referrals and end of semester exams.
    c. Monitor attendance of IMMM participants and consider following up with IMMM participants who miss exercise sessions. Consider a "check in" procedure mid-way through IMMM to support IMMM participants.
5. Develop a formal procedure for the conclusion of the IMMM program.
    a. Give IMMM participants adequate notice their time in the program is coming to an end.
6. Follow-up with participants after completing IMMM using both anonymous and face-to-face methods to understand the long-term effects after completing IMMM.

    a. Look into transitioning IMMM participants into exercising independently. This may include developing a "second step" of IMMM where participants can have access to the recreation complex independently or through group sessions.
7. Broaden the target population of the program to reach students without a formal diagnosis of depression and/or anxiety.
    a. Consider offering drop-in support for individuals seeking immediate support. This may help to reduce the length of the referral process.

APPENDIX J

Table 5. Definitions of peer support in the literature.

Definition	Source
"Peer support is social emotional support, frequently coupled with instrumental support, that is mutually offered or provided by persons having a mental health condition to others sharing a similar mental health condition to bring about a desired social or personal change."	(Gartner & Riessman, 1982, as cited in Cyr, Mckee, O'Hagan, & Priest, 2016, p. 14)
"Traditional therapeutic relationships are different from peer relationships. Peer relationships have more of a mutual, reciprocal nature and include friendship and an equal power base."	(Forchuk, Jewell, Schofield, Sircelj, & Valledor, 1998, as cited in Cyr et al., 2016, p. 14)
Peer support is "a system of giving and receiving help founded on key principles of respect, shared responsibility, and mutual agreement on what is helpful."	(Mead, Hilton, & Curtis, 2001, as cited in Cyr et al., 2016)